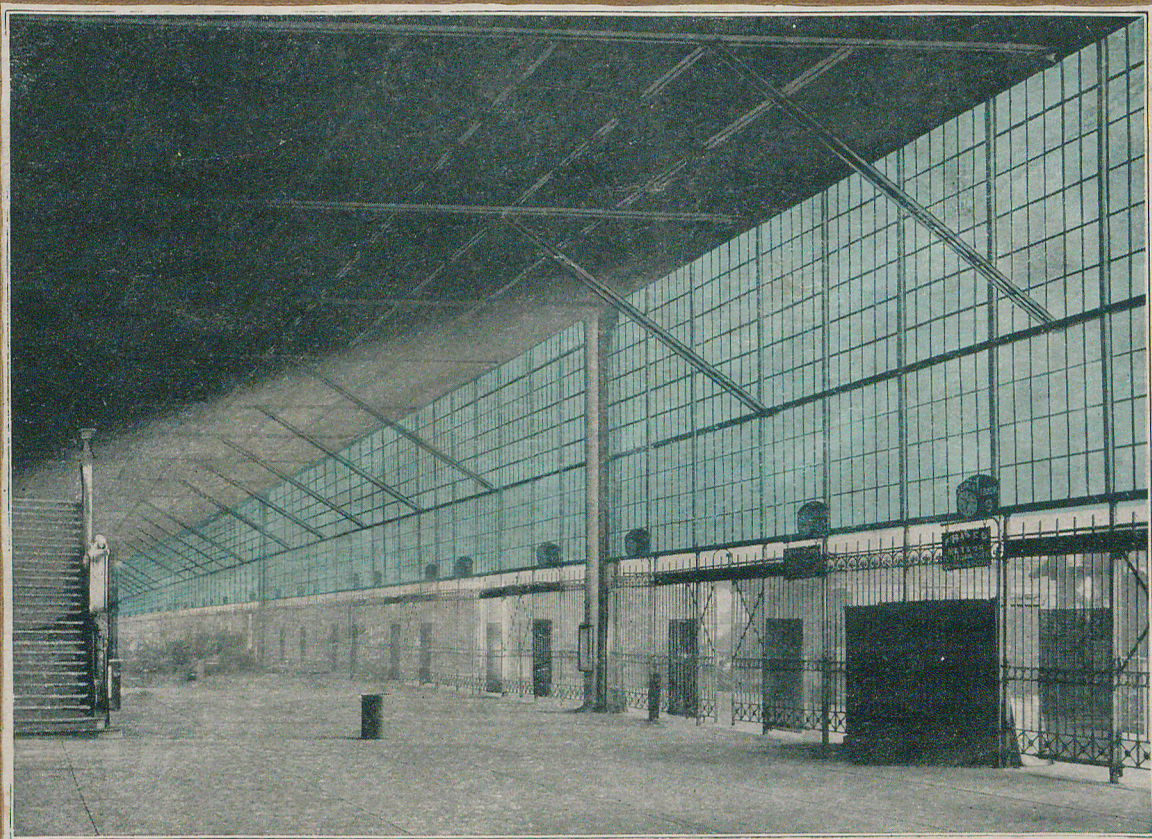
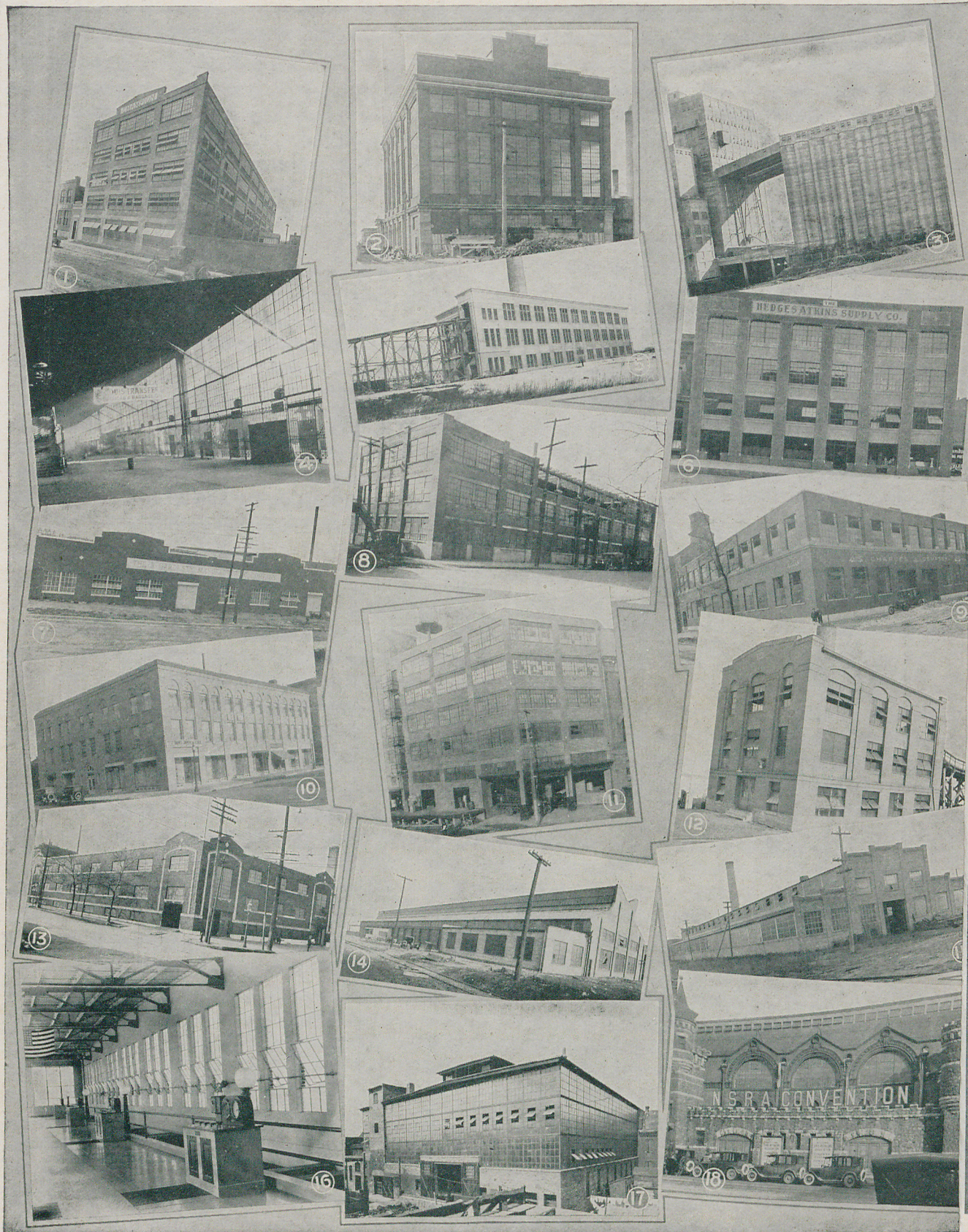


Mesker Bros. Iron Co. St. Louis, Mo.



Steel Windows

Photograph shows one third of Mesker Steel Sash midway enclosure in Union Station, St. Louis, containing over 20,000 square feet, for the Terminal Railroad Association, a \$100,000,000 Corporation.

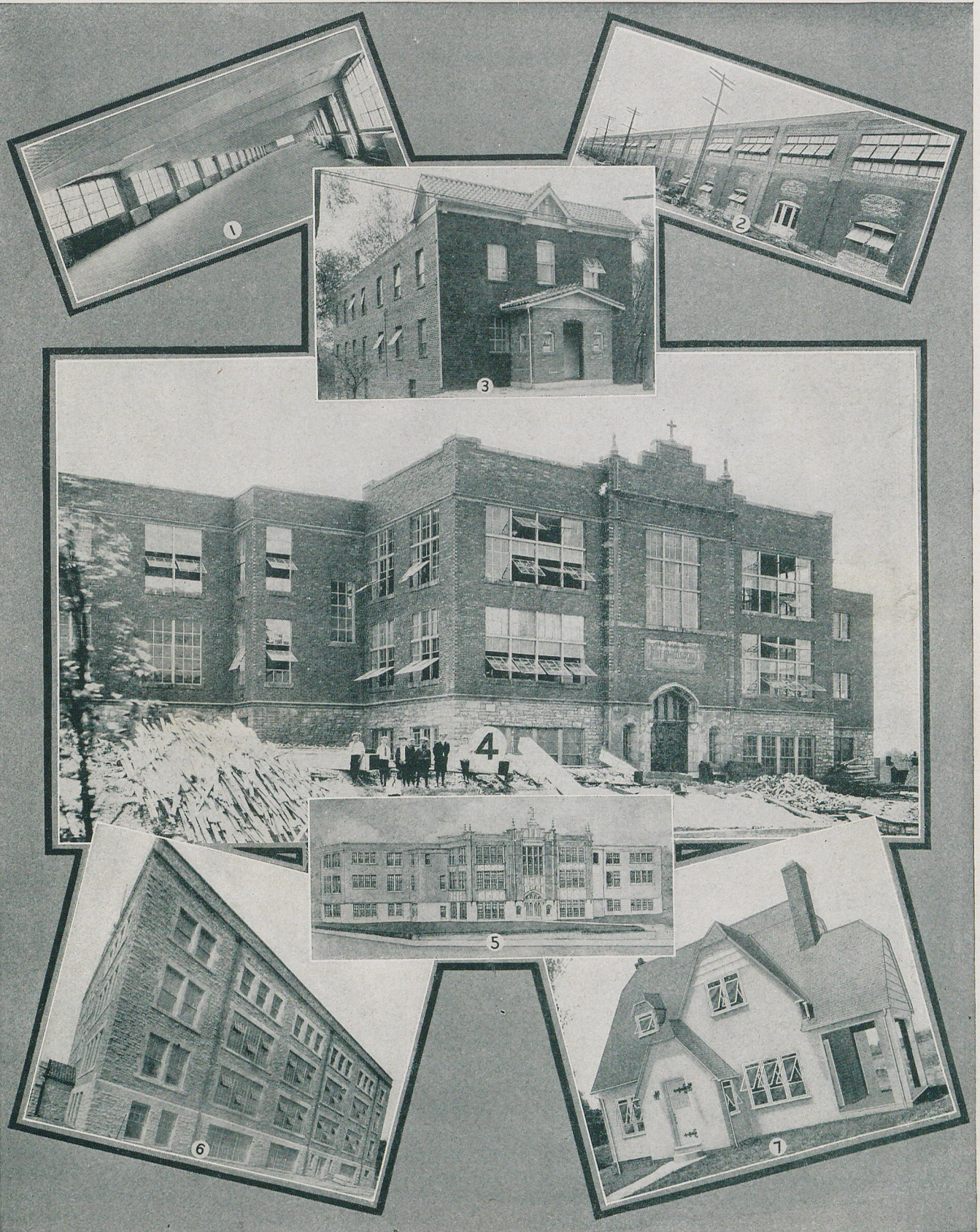


Above group is limited number of the many recently erected buildings equipped with the
Mesker Standard Solid Section Steel CENTER PIVOTED WINDOWS.

1. Champion Shoe Machy. Co., St. Louis, Mo.
2. Cosden Refinery Bldg., Tulsa, Okla.
3. Missouri Pacific Elevator, St. Louis, Mo.
4. Union Station Midway, St. Louis, Mo.
5. Standard Oil Co. Power Plant, Woodriver, Ill.
6. Hedges-Atkins Supply Co., Denver, Colo.

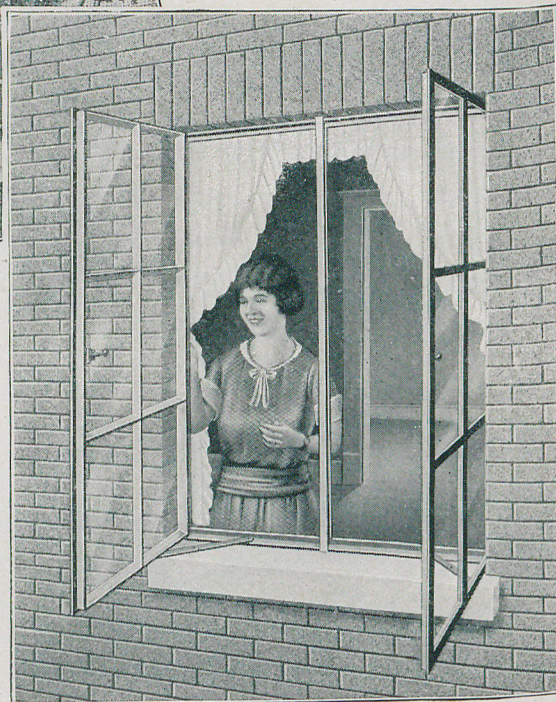
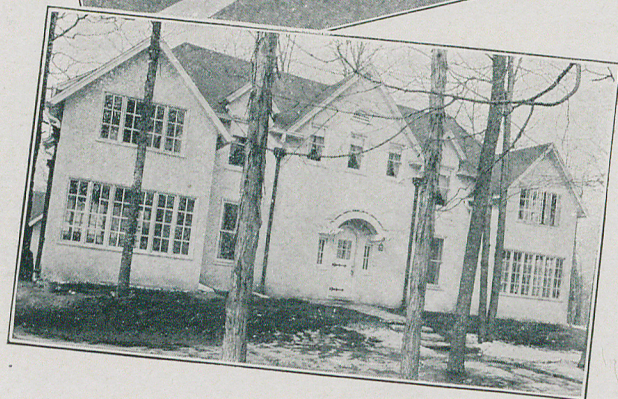
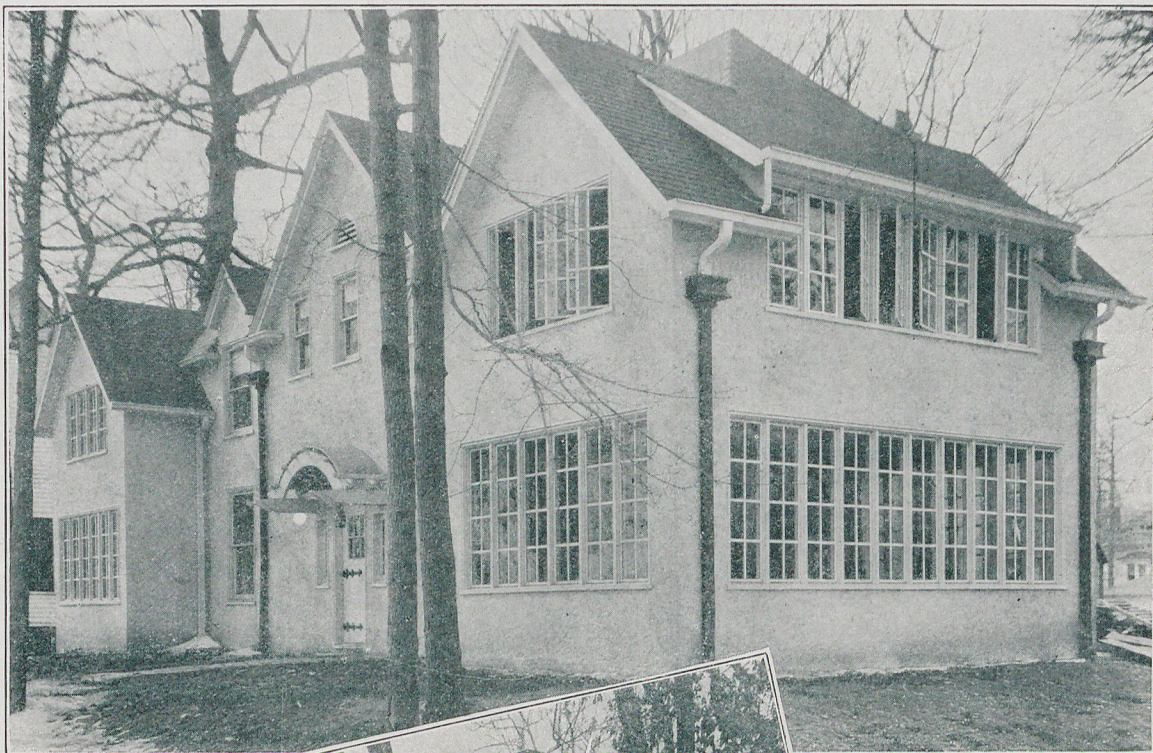
7. A. Hardesty Mfg. Co., Denver, Colo.
8. Talge Mahogany Co., Indianapolis, Ind.
9. Charles Dempsey Garage, Chicago, Ill.
10. Barnes Business College, Denver, Colo.
11. Greer & Laing Warehouse, Wheeling, W. Va.
12. Incinerating Plant, St. Louis, Mo.

13. Eu-Clede Garage, St. Louis, Mo.
14. Johnson Anderson Co., Chicago, Ill.
15. Tulsa Stove & Fdry. Co., Sand Springs, Ok.
16. Oklahoma City Filtration Plant, Tulsa, Okla.
17. Geo. J. Fritz Fdy. & Mach. Co., St. Louis, Mo.
18. Coliseum Bldg., Chicago, Ill.



Group of a limited number of the many buildings recently erected having windows of the Mesker **EXTENDING SIDE ARM VENTILATOR** Type.

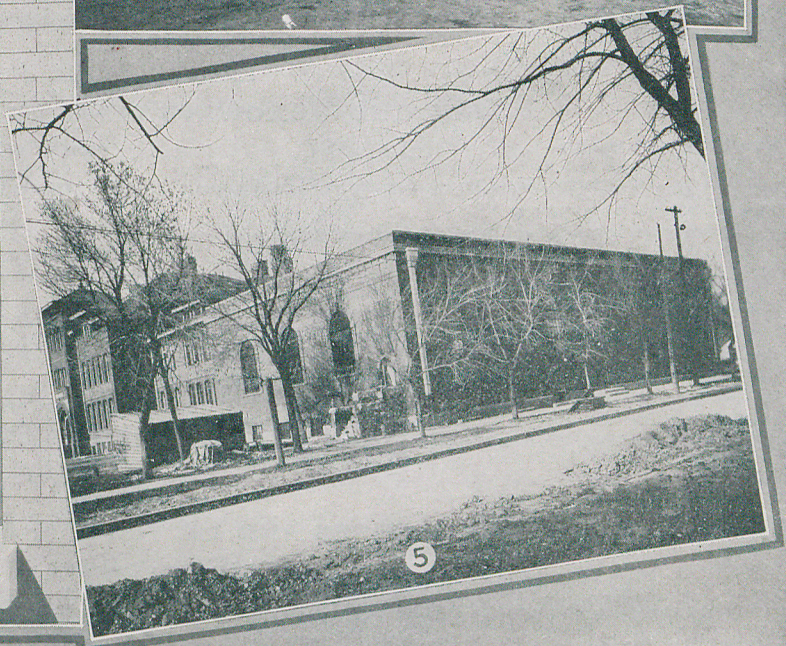
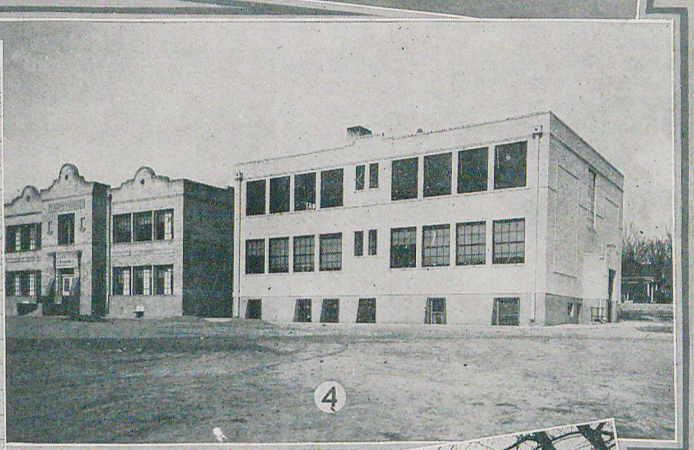
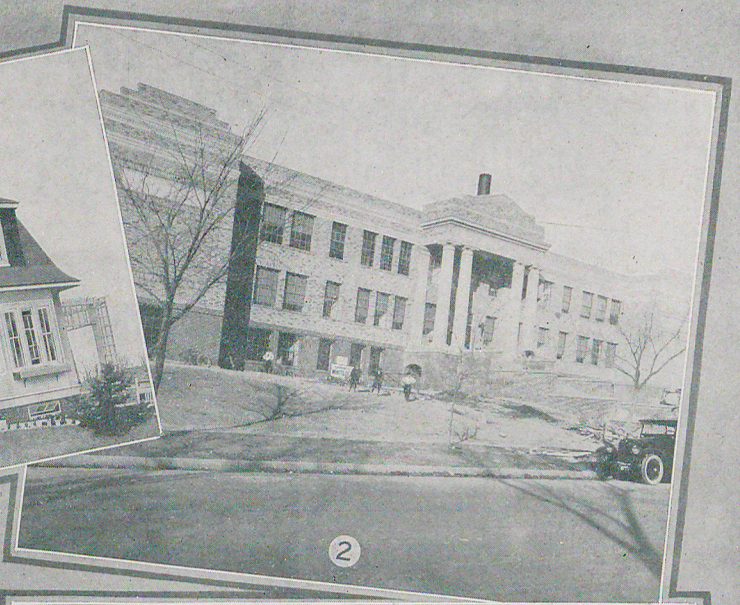
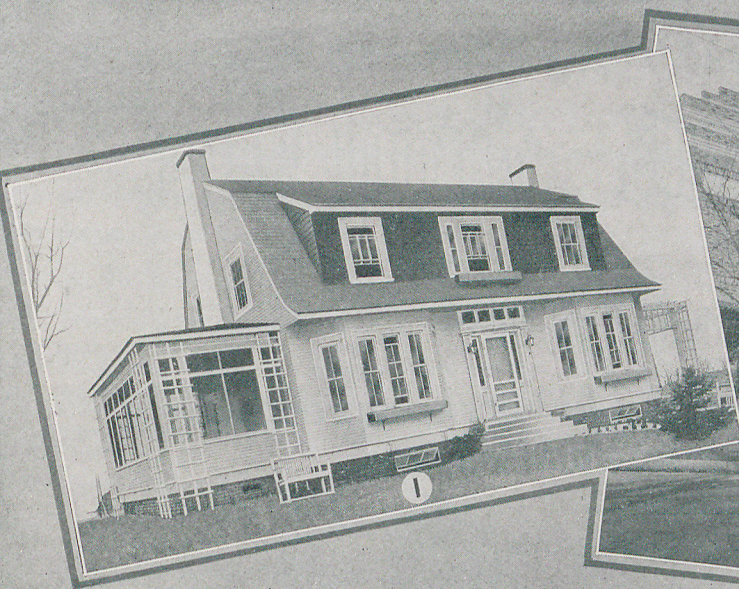
- | | |
|---|--|
| 1. Terminal Railroad Association Offices, Interior, 12th and Poplar, St. Louis, Mo. | 4. St. Edwards' Parochial School, St. Louis, Mo. |
| 2. Terminal Railroad Association Offices, Exterior, 12th and Poplar, St. Louis, Mo. | 5. St. Edwards' Parochial School, Architect's sketch |
| 3. Prather Apartments, Maplewood, St. Louis, Mo. | 6. Blessed Sacrament Parochial School, St. Louis, Mo. |
| —3— | 7. Typical Bungalow, equipped with Mesker Extending Ventilator Sash. |



Installations of the Mesker Standard Solid Section STEEL CASEMENT WINDOWS.

1. John T. Walbridge Club House, Chicago, Ill.
2. Typical Bungalow, equipped with Mesker Steel Casement Windows.

3. John T. Walbridge Club House, another view.
4. Typical Steel Casement Window installed in Residence.



Above are photographs of a few of the many installations of the Mesker **COMBINATION SHEET STEEL AND SOLID SECTION STEEL WINDOWS.**

Bungalow equipped with Mesker Combination Windows, Counterbalanced type.
School Building, Pueblo, Colo., Combination Windows, Double Hung type.
Typical installation of Mesker Combination Steel Window in Residence.

4. Park View School, Pueblo, Colo., Combination Windows, Double Hung type.
5. Another School Building, Pueblo, Colo., Combination Windows, Double Hung type.

Mesker Bros. Iron Co.

St. Louis, Mo.

SOLID STEEL SASH, HOLLOW METAL WINDOWS, STEEL AND CONCRETE STAIRS

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Casement Windows.....	15	Photographs, Casement Windows.....	4
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FOR THE FOLLOWING TYPES OF BUILDINGS:—

BUSINESS BUILDINGS—

Banks, Garages and Service Stations, Greenhouses, Lofts, Office Buildings, Restaurants, Stores, Warehouses and Storage Buildings.

EDUCATIONAL BUILDINGS—

Gymnasiums, Laboratories, Libraries, Schools and Colleges.

INSTITUTIONS—

Hospitals, Homes, Sanitariums.

INDUSTRIAL BUILDINGS—

Factories, Heating and Power Plants.

MILITARY AND NAVAL BUILDINGS—

Arsenals, Armories, Barracks, Camps, Fortifications, Hangars, Magazines.

PUBLIC BUILDINGS—

Capitols, City Halls, Town Halls, Court and Custom Houses, Comfort Stations, Fire and Police Stations, Jails and Reformatories, Post Offices.

PUBLIC WORKS—

Car Barns, Destructor Plants and Incinerators, Freight Houses, Ferry Houses, Light Houses, Lighting Systems (Gas and Electric) Radio Stations, Railroad Stations, Round Houses, Signal Towers.

RELIGIOUS BUILDINGS—

Churches, Chapels and Parish Houses, Convents, Monasteries.

RESIDENTIAL BUILDINGS—

Apartments, Flats and Tenements, Dwellings, Barns and Farm Buildings, Dormitories, Garages, Hotels and Stables.

SOCIAL AND RECREATIONAL BUILDINGS—

Auditoriums and Halls, Clubs, Lodges, Natatoriums, Bath Houses, Locker Buildings, Observation Stands and Stadiums, Park Pavilions, Rinks, Theaters and Service Buildings.

GENERAL OFFICES AND FACTORY, SAINT LOUIS, MISSOURI

BRANCH OFFICES:

Atlanta, Georgia
Baltimore, Maryland
Birmingham, Alabama
Boston, Massachusetts
Bluefield, West Virginia
Chattanooga, Tennessee
Charleston, West Virginia
Charlotte, North Carolina
Chicago, Illinois
Cincinnati, Ohio
Cleveland, Ohio
Columbus, Ohio

Dallas, Texas
Dayton, Ohio
Denver, Colorado
Detroit, Michigan
Houston, Texas
Indianapolis, Indiana
Kansas City, Missouri
Little Rock, Arkansas
Los Angeles, California
Louisville, Kentucky
Memphis, Tennessee

Miami, Florida
Milwaukee, Wisconsin
Nashville, Tennessee
Natchez, Mississippi
New Orleans, Louisiana
Norfolk, Virginia
Omaha, Nebraska
Oklahoma City, Oklahoma
Philadelphia, Pennsylvania
Pittsburgh, Pennsylvania
Roanoke, Virginia

alt Lake City, Utah
San Antonio, Texas
Spokane, Washington
Tampa, Florida
Toledo, Ohio
Tulsa, Oklahoma
Vicksburg, Michigan
Washington, D. C.
Wichita, Kansas
Wilson, North Carolina
Winston-Salem, North Carolina

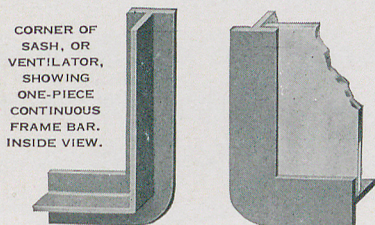
STANDARD CONSTRUCTION OF THE MESKER STEEL SASH

SECTIONS

The single bar sections for Mesker Steel Windows consist of one piece solid section rolled open hearth steel and gives maximum strength and rigidity, thoroughly weather-proof and neat in appearance.

FRAME AND VENTILATOR BARS

The outer members of the sash and ventilator frames comprising the top, bottom and two sides consists of *ONE CONTINUOUS, SOLID SECTION STEEL BAR, BENT ROUND AT THE CORNERS* (see engraving), and the two ends coming together is strongly spliced and welded. This continuous feature of the outer frame member makes the sash and ventilator at the four corners inflexible and unbreakable. It also prevents the sash from becoming twisted and warped out of square. No other sash manufactured has this superior quality.

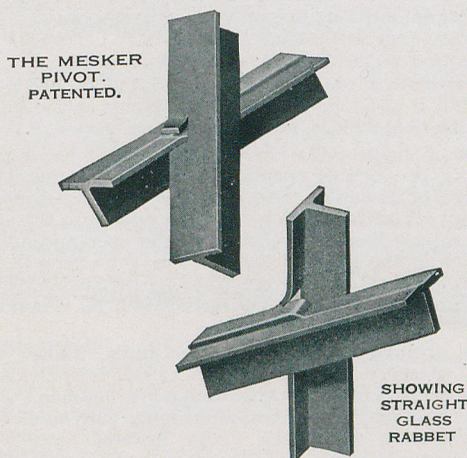


CORNER OF SASH, OR VENTILATOR, SHOWING ONE-PIECE CONTINUOUS FRAME BAR. INSIDE VIEW.

SAME CORNER, OUTSIDE VIEW, GLAZED

PIVOTS

The Mesker pivot is patented. It is not a hinge or an attachment of any kind, therefore, no plates, bolts, nuts, pins, or other loose parts are required in its make up. It cannot rust tight when not in use. Its superiority lies in the simplicity of its formation. A fulcrum bearing is pro-



THE MESKER PIVOT. PATENTED.

SHOWING STRAIGHT GLASS RABBET

vided on which the ventilator balances perfectly on its own axis and yields to the slightest touch of the push bar or chain operator. The pivot feature of the ventilator does not affect the alignment of the glass rabbets, they are as flat as the glass itself. The Mesker pivot permits the ventilator to be removed by window cleaners without the use of tools, and to be replaced without readjustment or refitting.

VENTILATORS

The weathering features of our ventilators are designed in accordance with the well-known principle of flat straight surface contact, overlapping the muntins three-eighth inch all around, which is preferable to the point or butt contact, making a continuous flat weathering, thoroughly rain proof. Ventilators are made entirely by machinery, assuring a closely-fitting, well-balanced sash, free from the uncertainty of hand labor, at the most important part of the window. Weep holes or drains are provided at sill of ventilator near the jamb, to carry off inside condensation.

When ventilators extend to both sides of window, keep sash slightly away from masonry to prevent ventilator from binding against the wall when opening.

JOINTS

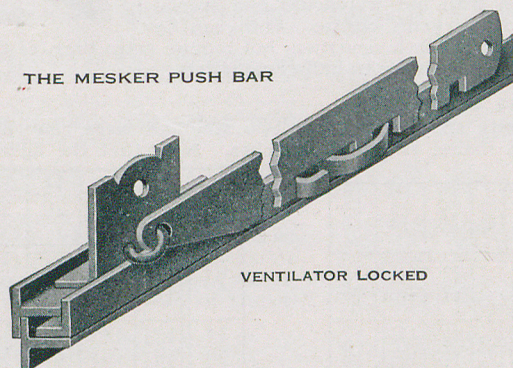
The joining of horizontal and vertical muntins if formed by a special (patent applied for) dovetail wedge and miter. Where the muntins intersect the frame bar, a double two-way mortise and tenon feature is employed, as shown by engraving. The joints being interlocked by powerful presses gives the sash great strength against wind pressure. Hand power in the manufacture of our steel windows is entirely eliminated, assuring a perfectly fitting and high-class article impossible of attaining by hand-made process.

JOINT AFTER ASSEMBLED, SHOWING CAULKING FEATURE.

JOINT OPEN, SHOWING DOUBLE MORTISE AND TENON, BEFORE ASSEMBLING.

PUSH BARS

Push bar sash adjusters are furnished for all ventilators, unless otherwise specifically mentioned. They are made of heavy rolled bar iron, connected with strong eye bolt to steel angle bracket, securely fastened to bottom of ventilator. Notches in edge of push bar fit over edge of weathering angle, enabling the ventilator to be opened at any required position. When ventilator is closed the push bar is folded back, inserting its notches into loops in weathering angle securely locking the ventilator.

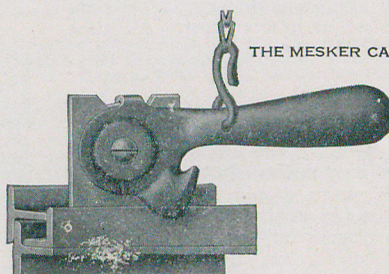


THE MESKER PUSH BAR

VENTILATOR LOCKED

CAM LOCK AND CHAIN HARDWARE

The cam lock is of heavy steel construction, connected to angle bracket with strong swivel bolt, and securely fastened to bottom of ventilator. The chain is fastened to top of ventilator by heavy steel ring, and holds the ventilator open at any desired angle by fastening the chain to cleat on wall or to hook at bottom of sash.



THE MESKER CAM LOCK

STANDARD CONSTRUCTION OF THE MESKER STEEL SASH

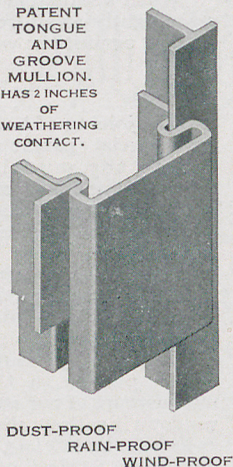
TONGUE AND GROOVE MULLIONS

Our PATENTED vertical mullions are used combining two or more units for openings of any width. The Mesker mullions consist of No. 14 and No. 16 gauge steel. They have the distinctive feature of matched tongue and groove boards, making them rainproof, wind-proof, and dustproof. Other superior qualities of our mullions are:

They have no unsightly bolts and nuts, or expansion slots, to mar their appearance or cause trouble in erection.

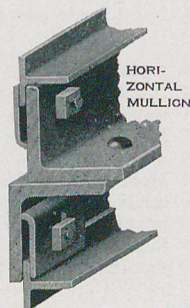
They have no seams to spread and admit water. They have two inches of continuous weathering contact. The tongue and groove feature provides for expansion and contraction, also for the most rapid installation at a reduction of 20% in cost.

See page 11 for illustration of tongue and groove mullions. They vary in width, from 3 inches up, as may be necessary to make up standard width of masonry opening.



HORIZONTAL MULLIONS

Horizontal mullions of the design here shown are desirable where one sash is set immediately above the other, and may be built up of angles and channels combined. These are never furnished by us unless specifically agreed upon, and are here shown merely as suggestion and information. The size and weight of these structurals depend on the width of opening.



MECHANICAL OPERATORS

These devices can be furnished in connection with our warehouse and special sash at an extra charge. Sash can be arranged for their reception, but require extra time, as these operators are made to individual orders.

GLASS SIZES

Units are furnished in two standard sizes, for lights 12 x 18 inches and 14 x 20 inches. Note that the lights in

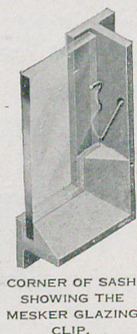
12 18	12 18	12 18	12 18	12 18
12 18	11 1/4 17 1/4	12 17 1/4	11 1/4 17 1/4	12 18
12 18	11 1/4 17 1/4	12 17 1/4	11 1/4 17 1/4	12 18
12 18	12 18	12 18	12 18	12 18

14 20	14 20	14 20	14 20	14 20
14 20	13 1/4 19 1/4	14 19 1/4	13 1/4 19 1/4	14 20
14 20	13 1/4 19 1/4	14 19 1/4	13 1/4 19 1/4	14 20
14 20	14 20	14 20	14 20	14 20

the ventilator are somewhat smaller. Glass may be single or double strength American 1/8-inch or 3/16-inch factory rough or ribbed, 1/4-inch rough or ribbed, maza, polished wire, or plain plate glass may be used. Adopting standard sizes will mean low cost and quick delivery, other sizes can be furnished at greater cost. All glass sizes should be rechecked.

GLAZING

Our glazing clips are of special design, devised to hold the glass firmly in place, four clips to each light. These clips take up the variation in the thickness of the glass. Special steel sash putty should be used. Ordinary putty dries out and breaks away. Spread putty on the glazing rabbet, force glass into same, completely filling the entire space between the glass and the steel. Excess putty neatly struck off and glass face puttied.



PAINTING

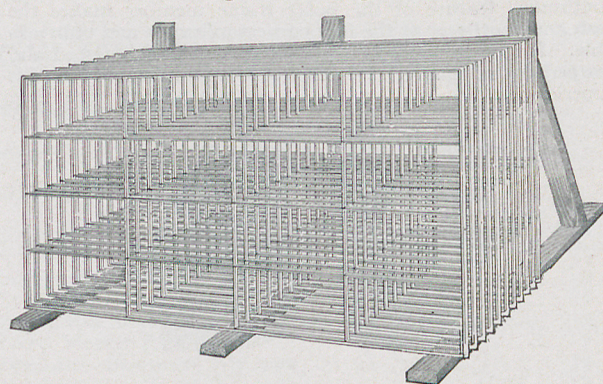
All sash receive one priming coat of paint before leaving our factory.

UNLOADING

Care must be exercised in unloading sash, lest they become damaged, making repairs necessary before installation.

STACKING

The sash should be stacked at building site in the manner shown by cut. They should never be laid flat. Lay three pieces of wood in level position, tilting sash against upright braces or lean them against building.



ERECTION

We cannot guarantee sash to be satisfactory unless they are set plumb, true and straight in the openings, which latter must have the angles true 90 degrees, when any ordinary mechanics can install them at nominal cost. Place wood blocks directly under sash at points shown in illustration and level the bottom of the sash, noting in particular that horizontal muntins line up with adjoining sash.

The steel clips with which the ventilator is fastened must never be removed until sash are ready for glazing.

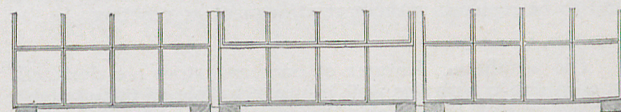
All ventilators are carefully tested before leaving the factory, but if adjusting should be necessary at the building it should be done before, not after sash are glazed.

To install single units after walls are built, leave groove in jamb on one side of opening 1 1/4-inch wide, and 1/2-inch wide in the other jamb. Slip one edge of the sash into the larger groove, and then swing the other edge into the smaller groove. Adjust the sash evenly into the opening and block up the sash at the sill, and secure upper projecting flange of sash to lintel construction, see page 11, details H1, H3, H5, H7. Build sill under sash and grout sash all around to a neat finish.

When opening has two or more units, allow 1/2-inch groove in masonry of each jamb. Set one sash flange into groove in either jamb and other flange into mullion. Follow in tongue and groove manner, alternating with mullion and sash, completing with sash flange inserted into 1/2-inch groove in opposite jamb.

Block up sash at sill with upper sash flange entering lintel and build up sill under sash. Do not crowd sash, use care, remove obstacles, and the result will be 20% saving in erection cost with tongue and groove mullions.

In concrete walls, a rebate should be formed in jambs. Install sash as directed above. Grout sash neatly all around.



USE STOCK SASH

There are forty types and forty sizes of Mesker Steel Sash now ready for your building.

PUSH BARS

Are furnished for all ventilators, except for ventilators out of reach by hand, then cam locks and chains are provided.

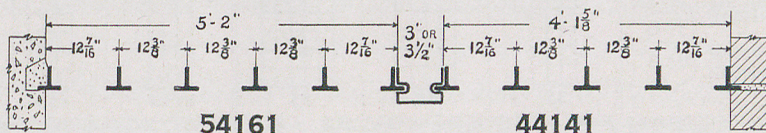
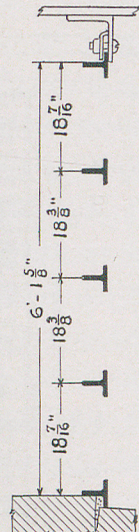
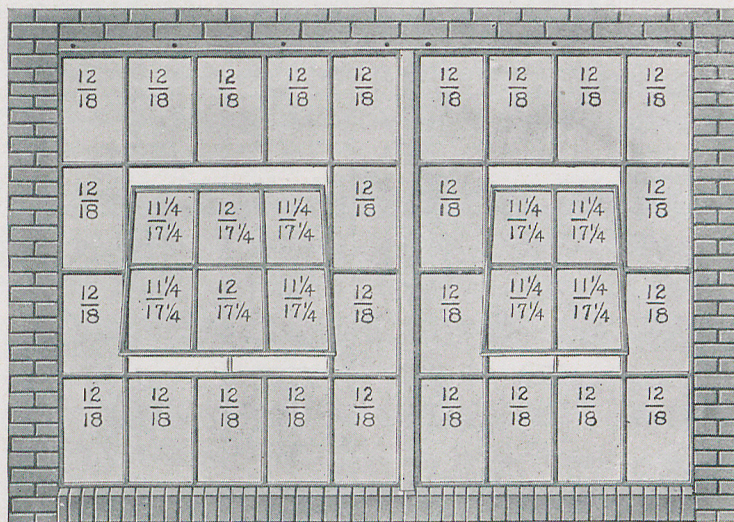
INSTALLATION AND DIMENSIONS

The above cut shows the installation of two Standard Units of Mesker Solid Section Steel Sash 54161 and 44141 for 12 x 18-inch glass, with a Mesker tongue and groove mullion joining them together.

The dimensions given are from the bar centers between the glass to the outside measure of the sash. The dimensions given of the sash units are the clear masonry openings for single units.

Sash measure is taken from outside to outside of stem of the sash bar, both for width and height.

The mullions joining several units may be of variable widths to accommodate the width of the openings, but standard widths and heights as given on page 10 are recommended and should be used for the most desirable installations.



UNDERWRITERS' SIDE WALL CENTER PIVOTED SASH

Are also carried in stock, and are of the same construction and dimensions as Standard Sash plus the small steel glazing angles. The sash are subject to the rigid inspection of the National Board of Fire Underwriters, bearing their labels of approval, are accepted by rating bureaus everywhere in the United States and Canada as Underwriters' Sash.

PUSH BAR SASH ADJUSTERS

Without the fusible links are permitted in some localities, but is subject to the approval of the local Fire Rating Bureau.

MULLIONS

The Mesker (PATENTED) tongue and groove mullions are employed to combine labeled sash units in wide openings. A special type mullion is furnished in connection with labeled sash for openings more than eight feet in height.

GLAZING

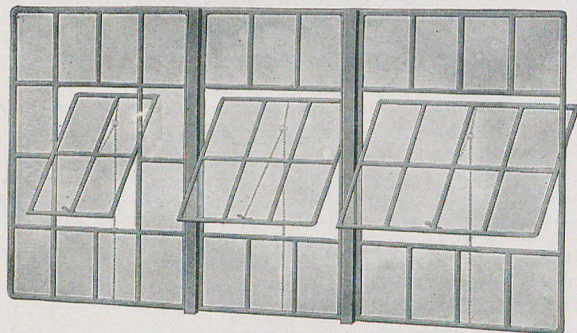
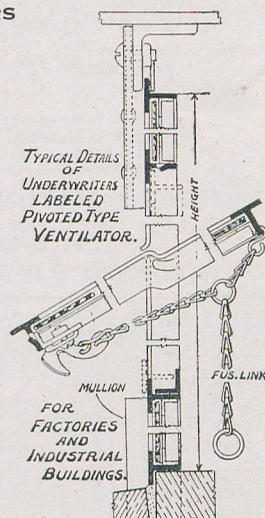
The glazing is accomplished by small steel glazing angles, held in place by tap screws or split rivets. Special installation and glazing instructions accompany each shipment of Underwriters' Sash.

COMMENT

The weather side of our sash have a very neat finish, clear cut muntin lines, symmetry in appearance, and free from projections or flanges to catch dust, snow or other objectionable matter to hasten rusting.

These steel windows are lower in price than wood and far more desirable, considering volume of light area and ventilation, they are incomparably superior.

Customers are given the benefit of our very low prices, attained by purchasing material in large quantities at advantageous market quotations, by manufacturing sash at a ratio of 95% machine labor to 5% hand labor, and by the 33 1/3% less freight charges than obtain in other sash.



DIMENSIONS

The maximum size of units is 7 feet 0 inches by 12 feet 0 inches, and may be used in multiples, but not more than two ventilators to each unit, and no ventilator to exceed 3,000 square inches of area.

FUSIBLE LINKS

And chains are furnished with the Mesker Gravity Cam Locks, which permits ventilators to close automatically by gravity at the approach of fire or excessive heat.

PRICE LISTS AND TERMS OF SALE

Mesker Bros. Iron Co. are publishers of the first steel sash catalogue in the United States giving prices of steel window sash. See page 10 for price list in this issue.

Customers will please write for price lists and avail themselves of the prevailing discount and estimate the cost of their requirements. All prices in this Catalog are F. O. B. cars, St. Louis, Mo. Subject to discount. NET CASH upon receipt of goods. ALL prices are subject to change without notice. Those desiring credit must have good commercial rating or furnish references from whom satisfactory information must be obtained before shipment will be made.

NO GOODS will be shipped C. O. D. or to our order with draft attached to Bill of Lading, unless one-half payment is made in advance, to insure acceptance, or unless guaranteed by your bank or banker. No extension allowed nor more than thirty days credit given except by special agreement.

CLAIMS against invoice must be made upon receipt of goods. REMITTANCES must be made by draft or its equivalent, Express or P. O. Money Order, not by personal check unless exchange is added. ALL contracts or agreements are contingent upon Strikes, Accidents, Delays or Damages by carriers and other delays unavoidable or beyond our control. ALL orders sent us without previous quotations will be shipped at our regular prices, which will be as low as if quoted before receiving the order.

As questions constantly arise as to the responsibility of shippers, for loss of and damage to goods, etc., in transit, we call the special attention of our customers to the following: Our responsibility ceases as soon as goods are delivered in good order and condition at shipping point, and a receipt taken for same, we as senders, having no legal claim after the goods are delivered to the carriers properly consigned, as the ownership has passed from us to consignee.




































No goods returned will be received by us unless we have been corresponded with and have given our permission that same may be returned, and customer returning must in all cases pay freight and expense. After orders are entered the cancellation of same must be subject to our acceptance. It is expressly understood that all orders imply an acceptance of above terms of payment and conditions of shipment.

All contracts and agreements received by our sales representatives are subject to the approval of the home office, and such approval must be signed by an officer of the company to be valid; and unless so signed the responsibility rests with the representative and not with the company.

MESKER BROTHERS IRON COMPANY

Publishers of THE FIRST STEEL SASH PRICE LIST in the United States

Follow Heavy Face Type for 12" x 18" Glass and Light Face Type for 14" x 20" Glass.

HEIGHT OF WINDOW OPENINGS. { 3'-0 7/8" 3'-4 7/8"							
WIDTH OF OPENINGS.	3'-1 1/4"	3'-7 1/4"	4'-1 1/8"	4'-9 1/8"	5'-2"	6'-0"	
PRICE OF SASH	\$2.26	2.42	\$2.79	3.17	\$3.48	3.86	
	32	42	52	32-160	42-140	42-180	52-160
HEIGHT OF WINDOW OPENINGS. { 4'-7 1/4" 5'-1 1/4"							
WIDTH OF OPENINGS.	3'-1 1/4"	3'-7 1/4"	4'-1 1/8"	4'-9 1/8"	5'-2"	6'-0"	
PRICE OF SASH	\$3.10	3.48	\$4.01	4.54	\$4.85	5.53	
	33	43	53	33-161	43-141	43-181	53-161
HEIGHT OF WINDOW OPENINGS. { 6'-1 1/8" 6'-9 1/8"							
WIDTH OF OPENINGS.	3'-1 1/4"	3'-7 1/4"	4'-1 1/8"	4'-9 1/8"	5'-2"	6'-0"	
PRICE OF SASH	\$4.01	4.54	\$5.30	5.83	\$6.36	7.13	
	34	44	54	34-161	44-141	44-181	54-161
HEIGHT OF WINDOW OPENINGS. { 7'-8" 8'-6"							
WIDTH OF OPENINGS.	3'-1 1/4"	3'-7 1/4"	4'-1 1/8"	4'-9 1/8"	5'-2"	6'-0"	
PRICE OF SASH	\$5.07	5.61	\$6.36	7.13	\$7.73	8.71	
	35	45	55	35-161	45-141	45-181	55-161
HEIGHT OF WINDOW OPENINGS. { 9'-2 3/8" 10'-2 3/8"							
WIDTH OF OPENINGS.	3'-1 1/4"	3'-7 1/4"	4'-1 1/8"	4'-9 1/8"	5'-2"	6'-0"	
PRICE OF SASH	\$5.90	6.58	\$7.39	8.48	\$9.17	10.49	
	36	46	56	36-161	46-141	46-181	56-161

STANDARD OPENING SIZES FOR CENTER PIVOTED AND EXTENDING VENTILATOR SASH

Eight light ventilators not recommended for side arm extending type.

Prices are F. O. B. cars St. Louis, not including glass and putty. Glass is always kept in stock for prompt delivery and is quoted on application.

SIZES FOR 12" x 18" GLASS

Width of Window Opening	Total No. of Lights Wide	No. of Units	Number of Lights Wide				
			1st Unit	2nd Unit	3rd Unit	4th Unit	5th Unit
3'-1 1/4"	3	1	3	...	...	...	...
4'-1 1/8"	4	1	4	...	...	...	...
5'-2"	5	1	5	...	...	...	...
6'-6"	6	2	3	3	...	...	...
8'-6 3/8"	8	2	4	4	...	...	...
10'-7 1/8"	10	2	5	5	...	...	...
9'-10"	9	3	3	3	3	...	...
10'-10 3/8"	10	3	3	4	3	...	...
11'-10 3/8"	11	3	3	5	3	...	...
11'-10 3/8"	11	3	4	3	4	...	...
12'-11 1/8"	12	3	4	4	4	...	...
13'-11 1/8"	13	3	5	3	5	...	...
13'-11 1/8"	13	3	5	4	5	...	...
14'-11 1/8"	14	3	5	4	5	...	...
16'-0 1/8"	15	3	5	5	5	...	...
13'-2"	12	4	3	3	3	3	...
15'-2 3/8"	14	4	4	3	3	4	...
15'-2 3/8"	14	4	4	4	4	3	...
17'-3 1/8"	16	4	4	4	4	4	...
17'-3 1/8"	16	4	5	3	3	5	...
17'-3 1/8"	16	4	5	3	5	3	...
17'-3 1/8"	16	4	5	3	5	3	...
19'-4 1/8"	18	4	4	5	5	4	...
19'-4 1/8"	18	4	5	4	4	5	...
21'-5"	20	4	5	5	5	5	...
16'-6"	15	5	3	3	3	3	3
17'-6 3/8"	16	5	3	3	4	3	3
17'-6 3/8"	16	5	3	3	5	3	3
18'-6 3/8"	17	5	3	4	3	4	3
19'-7 1/8"	18	5	3	4	4	4	3
19'-7 1/8"	18	5	4	3	4	3	4
20'-7 1/8"	19	5	5	3	3	3	5
21'-7 1/8"	20	5	4	4	4	4	4
21'-7 1/8"	20	5	5	3	4	3	5
21'-7 1/8"	20	5	5	3	5	4	3
22'-8 1/8"	21	5	5	4	3	4	5
22'-8 1/8"	21	5	4	5	3	5	4
22'-8 1/8"	21	5	4	4	5	4	4
22'-8 1/8"	21	5	5	3	5	3	5
23'-8 1/8"	22	5	4	5	4	5	4
23'-8 1/8"	22	5	5	4	4	4	5
24'-9"	23	5	5	4	5	4	5
24'-9"	23	5	4	5	5	5	4
25'-9 3/8"	24	5	5	5	4	5	5
26'-9 3/8"	25	5	5	5	5	5	5

Our patented tongue and groove mullions should be used with two or more standard units for large openings.

WAREHOUSE STOCK

Large quantities of the above sizes in Center Pivoted Type are in stock and immediate deliveries can be made if desired.

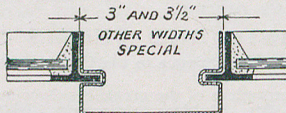
WRITE FOR DISCOUNTS

SIZES FOR 12"x18" GLASS

Height of Window Opening	No. of Lights High
3'-0 7/8"	2
4'-7 1/4"	3
6'-1 1/8"	4
7'-8"	5
9'-2 3/8"	6

SIZES FOR 14"x20" GLASS

Height of Window Opening	No. of Lights High
3'-4 7/8"	2
5'-1 1/4"	3
6'-9 1/8"	4
8'-6"	5
10'-2 3/8"	6



Detail of Standard Mullion and Sash Bar.

Mullions for 2 units are 3 1/2" wide.
Mullions for 3 units are 3 1/2" wide.
Mullions for 4 units are 3" wide.
Mullions for 5 units are 2 1/2" wide.

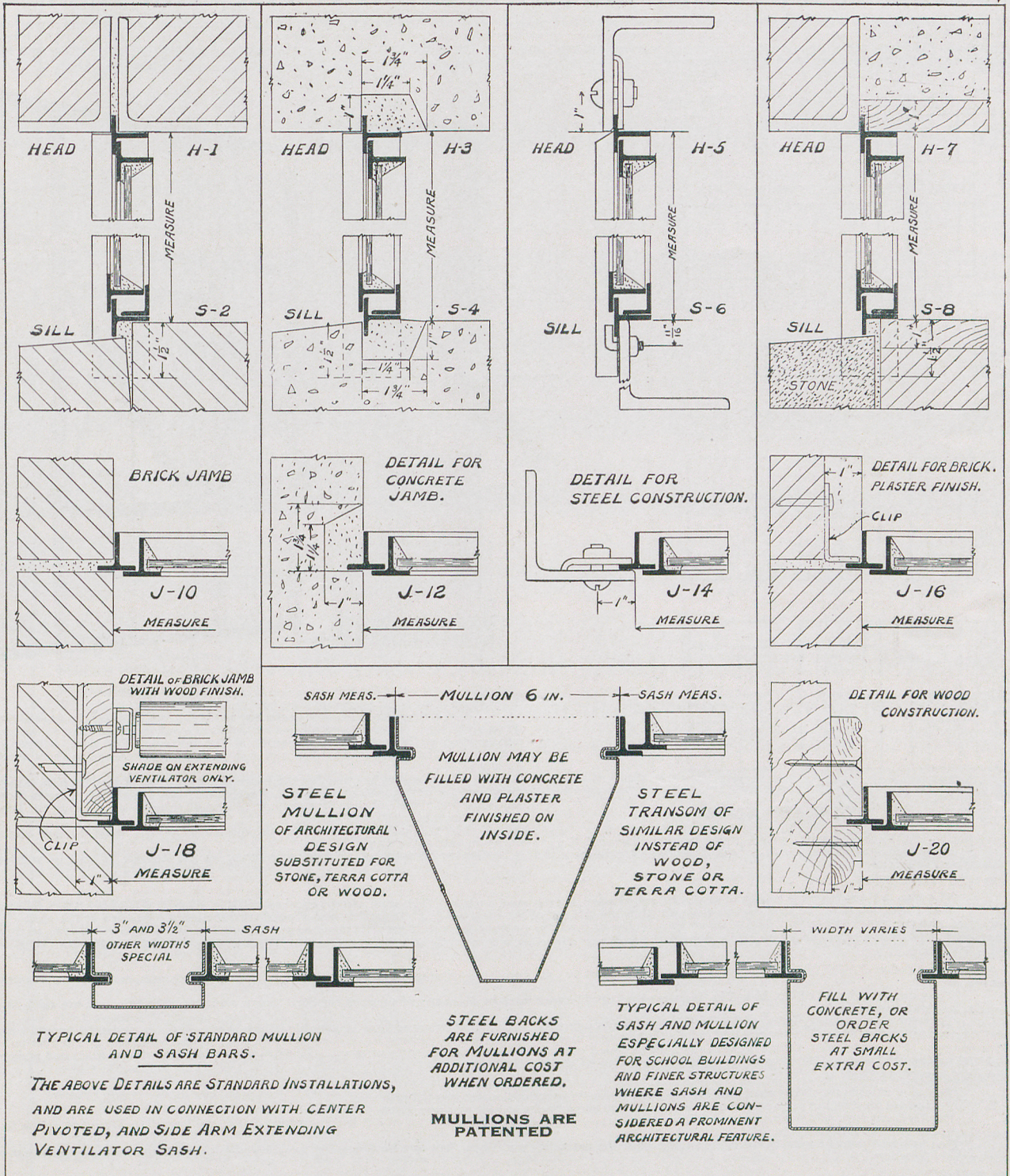
UNDERWRITERS' LABELED SASH

are also carried in stock and are of the same construction as our Standard Sash, plus the small steel glazing angles. The sash are subject to the rigid requirements and inspection of the National Board of Fire Underwriters, bearing their labels of approval and adopted by rating bureaus everywhere in the United States and Canada as standard Underwriters' sash.

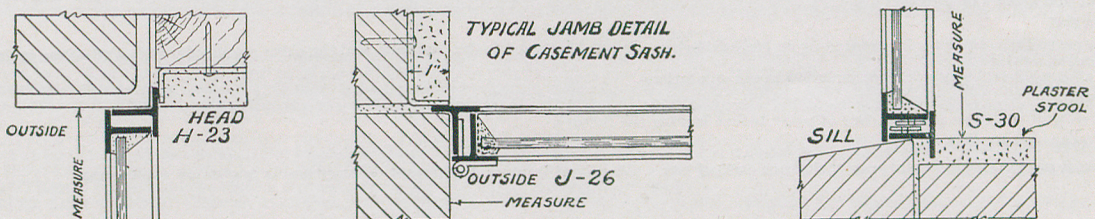
SIZES FOR 14" x 20" GLASS

Width of Window Opening	Total No. of Lights Wide	No. of Units	Number of Lights Wide				
			1st Unit	2nd Unit	3rd Unit	4th Unit	5th Unit
3'-7 1/4"	3	1	3	...	...	...	...
4'-9 1/8"	4	1	4	...	...	...	...
6'-0"	5	1	5	...	...	...	...
7'-6"	6	2	3	3	...	...	...
9'-10 3/8"	8	2	4	4	...	...	...
12'-3 1/8"	10	2	5	5	...	...	...
11'-4"	9	3	3	3	3	...	...
12'-6 3/8"	10	3	3	4	3	...	...
13'-8 3/8"	11	3	3	5	3	...	...
13'-8 3/8"	11	3	4	3	4	...	...
14'-11 1/8"	12	3	4	4	4	...	...
16'-1 1/8"	13	3	4	5	4	...	...
16'-1 1/8"	13	3	5	3	5	...	...
17'-3 1/8"	14	3	5	4	5	...	...
18'-6 1/8"	15	3	5	5	5	...	...
15'-2"	12	4	3	3	3	3	...
17'-6 3/8"	14	4	4	3	3	4	...
17'-6 3/8"	14	4	4	4	4	3	...
19'-11 1/8"	16	4	4	4	4	4	...
19'-11 1/8"	16	4	5	3	3	5	...
19'-11 1/8"	16	4	3	5	5	3	...
22'-4 1/8"	18	4	4	5	5	4	...
22'-4 1/8"	18	4	5	4	4	5	...
24'-9"	20	4	5	5	5	5	...
19'-0"	15	5	3	3	3	3	3
20'-2 3/8"	16	5	3	3	4	3	3
21'-4 3/8"	17	5	3	3	5	3	3
21'-4 3/8"	17	5	3	4	3	4	3
22'-7 1/8"	18	5	3	4	4	4	3
22'-7 1/8"	18	5	4	3	4	3	4
23'-9 1/8"	19	5	5	3	3	3	5
24'-11 1/8"	20	5	4	4	4	4	4
24'-11 1/8"	20	5	5	3	4	3	5
24'-11 1/8"	20	5	5	3	5	4	5
26'-2 1/8"	21	5	4	4	5	4	4
26'-2 1/8"	21	5	5	3	5	3	5
26'-2 1/8"	21	5	4	5	3	5	4
27'-4 3/8"	22	5	4	5	4	5	4
27'-4 3/8"	22	5	5	4	4	4	5
28'-7"	23	5	5	4	5	4	5
28'-7"	23	5	4	5	5	5	4
29'-9 3/8"	24	5	5	5	4	5	5
30'-11 3/8"	25	5	5	5	5	5	5

STANDARD INSTALLATION DETAILS OF THE MESKER CENTER PIVOTED AND EXTENDING VENTILATOR WINDOWS

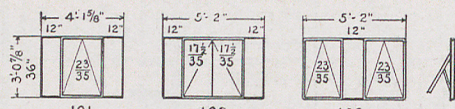


TYPICAL CASEMENT SASH DETAILS.

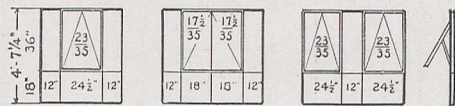


THE MESKER SIDE ARM EXTENDING VENTILATOR SASH

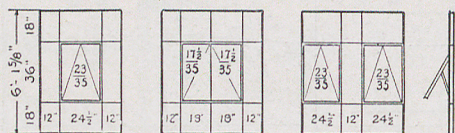
The Mesker Solid Section rolled open hearth Steel Sash with improved Side Arm Extending Ventilators are especially adapted, and are being extensively used in Schools, Industrial and Office Buildings, or wherever a superior window with maximum ventilation is desired. They are readily adopted by Architects and School Boards for the most perfectly operating windows without projecting the sash into the rooms. When open, the ventilator serves either as a rain shield or as an awning as well as for ventilation.



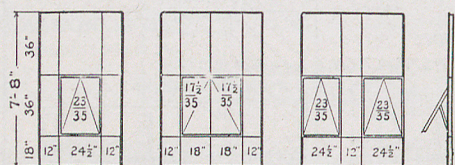
OPENING DIMENSIONS ARE GIVEN WITHIN BRACKETS,



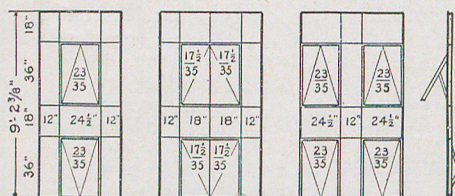
ON TOP, AND AT SIDES HEREWITH.



GLASS SIZES ARE INDICATED IN INCHES



VENTILATOR LIGHTS ARE SMALLER.



STANDARD SIZES

from the vertical to the horizontal plane, giving window cleaners full access to the outside of the glass. Another distinguishing feature of the Extending Ventilator is that it admits the attachment of window screens, on the interior as well as window shades and draperies.

CONSTRUCTION

The sash and ventilator is constructed of solid rolled open hearth steel section. The outer frame consists of ONE PIECE CONTINUOUS STEEL BAR, bent round at the four corners and welded at the splicing of the two ends. The muntins, also of solid steel section are tenoned at the ends and mortised into the frame members. And when caulked by heavy machinery makes the sash of greatest possible strength, and perfectly square and true, so that they cannot be racked out of shape by careless or rough handling. No other sash manufactured has this superior ONE-PIECE FRAME BAR FEATURE.

MULLIONS

The Mesker PATENT Mullions are designed to be used to join a multiple of units in large openings for lighting class rooms, auditoriums, hospital wards, etc.

They are constructed of No. 14 or No. 16 gauge steel, and formed into the distinctive feature of matched tongue and groove boards, and are rainproof, windproof, and dustproof.

They have no unsightly bolts, nuts or expansion slots to mar their appearance or cause time or trouble in erection. And no seams to spread open and admit dust and water. The tongue and groove feature provides for expansion and contraction and also for the most rapid installation at a reduction of 20% in cost. See page 11 for special types of mullions designed to substitute stone, terra cotta or wood. These mullions may be concrete filled and plaster finished on the interior and they present an architectural finish on the exterior.

STANDARD SIZES

The sizes of units for this type of sash are the same as for the standard center pivoted type. Customers sending inquiries regarding this type of sash should refer to unit numbers given. For high windows where an upper and lower ventilator is desired as in Nos. 501-502-503 it is recommended that the lower one extend in at the top and the upper one extend out at the bottom. One hundred percent ventilation is obtainable with the extending ventilator, but maybe opened to any desired angle without the use of push bar or any other fasteners.

GLAZING

Our glazing clips, of special design, are devised to hold the glass firmly in place. Holes are provided in the muntin bars for the clips—four or more to each light. The clips take up the variation in thickness of the glass. Special steel sash putty should be spread on the glazing rabbet and the glass forced into same, completely filling the entire space between the glass and the steel. Do not use ordinary putty, it dries out and breaks away. Excess putty should be struck off and glass face puttied.

HARDWARE

The extending ventilator is operated by an endless chain. One end fastened to the cam lock, and the other passing through a wheelless pulley is secured to the bottom of ventilator.

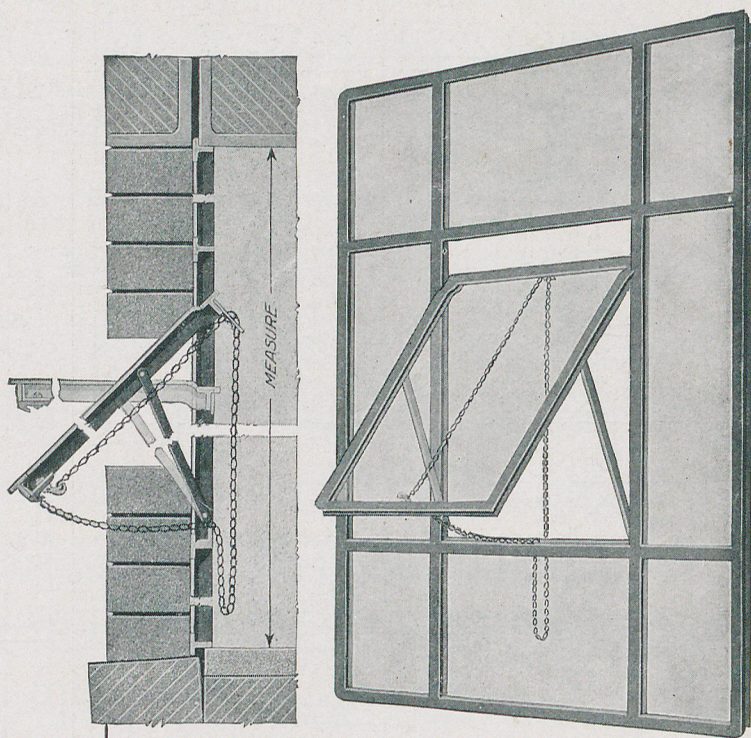
Chains, pulleys, locks, etc., are included in our quotations.

PAINTING

These sash receive a priming coat of paint before leaving the factory.

PRICES ON APPLICATION

Special prices quoted for large quantities or carload lots. Glass kept in stock for prompt delivery and is quoted on application.



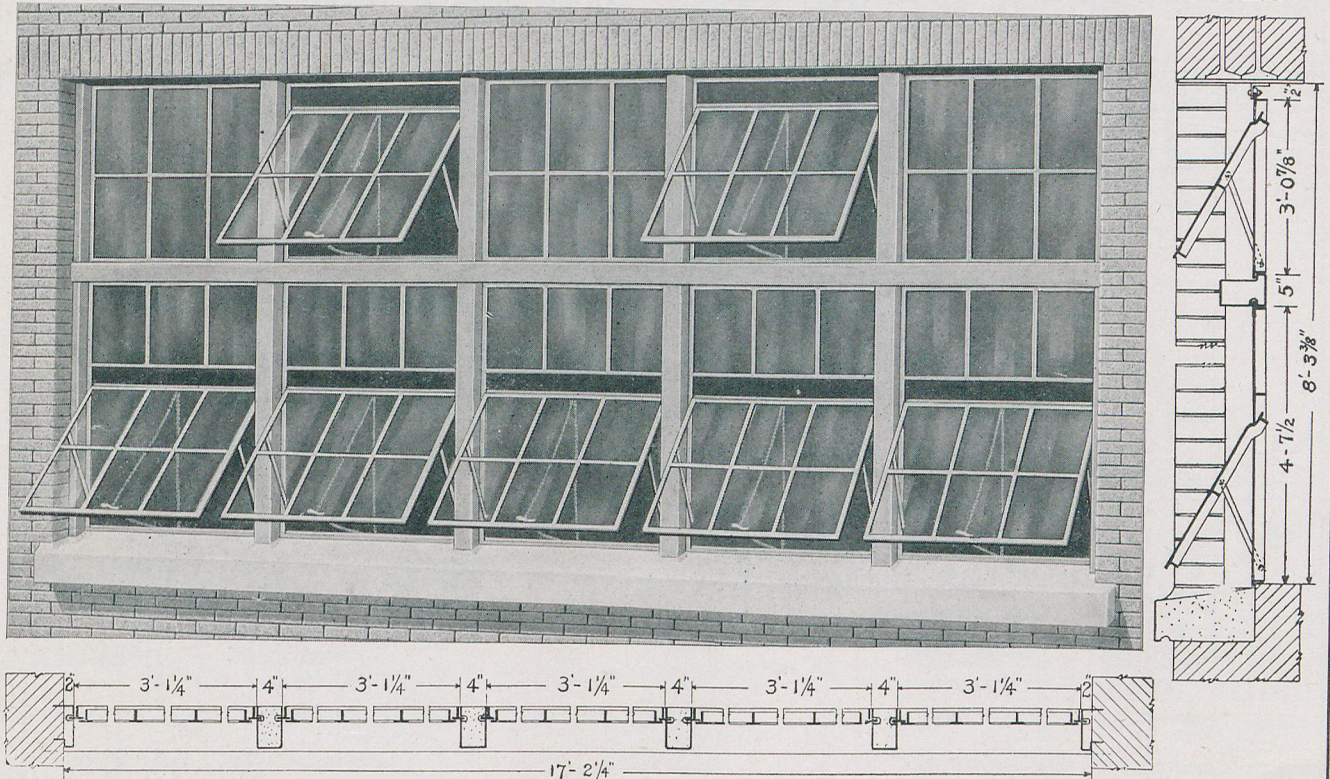
TYPE

The Extending Ventilator opens out at the bottom, causing the top to slide down vertically. This is accomplished by means of a pull chain fastened at the top, which projects the ventilator outwardly at the bottom. The slam, heretofore experienced when closing other types of sash is entirely eliminated in the extending type.

The necessary friction for the successful operation of this type of sash is developed by our special construction of sash bar. Has no springs or bolts to be adjusted, but a vertical slide arrangement of utmost simplicity, requiring the least effort to operate.

The self balancing ventilator automatically adjusts itself to any angle, from the vertical to the horizontal plane.

THE MESKER SOLID SECTION STEEL WINDOW FOR SCHOOLS



Showing Typical large area window for School Buildings; with the Mesker Patent Mullions combining several sash units. The heavy Steel Mullions have the appearance of stone or terra cotta and add to the Architectural beauty of the structure. In the Mesker Solid Section School Window is found a most desirable means for day lighting large Halls, Class Rooms, and Auditoriums, and is being largely adopted by Architects for this purpose. The Mesker Patent Mullion may be plain or moulded into artistic design to represent cut stone and to carry into effect the general appearance of the building.

SPECIFICATION FOR STEEL SASH MESKER PIVOTED WINDOWS

All sash throughout shall be **MESKER PIVOTED SASH** manufactured by Mesker Brothers Iron Company, St. Louis, Mo. All muntin bars shall consist of one continuous piece of solid section rolled open hearth steel. Intersecting joints shall be formed by a dovetail wedge and mitre which is to be locked into place by powerful presses. The joints at the frame bars shall consist of a double two-way **INTERLOCKING MORTISE AND TENON** (special feature). The iron in the frame bar to be pressed hard against said tenon. Frame bars of both sash and ventilators shall be of **ONE CONTINUOUS SOLID SECTION STEEL BAR** bent round at corners and where the two ends come together they shall be solidly spliced and welded. All sash to be furnished with standard angle brackets for attaching hardware. All ventilators to be furnished with standard push bars, unless otherwise specified. All ventilators inaccessible to the floor are to be operated by chain and cam lock, except when mechanical operators shall be specified. Vertical mullions are to be Mesker Patent tongue and groove type made of No. 16 gauge open hearth steel plates. Horizontal mullions to be either Mesker tongue and groove or mullions or built up mullions of angles and channels.

To erect Mesker sash one unit to the opening, the walls should be bricked up to about $\frac{1}{2}$ the height of the sash leaving a slot or rebate in the wall $\frac{1}{2}'' \times \frac{1}{2}''$ so that the sash can be slid down into place, wedged and trued up to the proper position. Then the sash is securely bricked in. Do not crowd the sash at the ventilators. To erect sash of more than one unit to the opening, the opening should be built the full height, leaving a $\frac{1}{2}'' \times \frac{1}{2}''$ opening on both jambs, having a single angle lintel construction, and omitting one course of bricks at the bottom. The units should then be placed in the opening and loosely bolted to the lintel. See that the jambs of the sash are in the rebate at the side of the opening. Then spring the sash out to a bowed position and insert mullion between units, putting the flanges of sash in the slots of mullion, then forcing the mullion up against the lintel and spring the sash back into line and then block same in place, and securely bolt. Then the sill course may be laid and sash grouted in place. All sash shall receive one priming coat of paint before leaving our factory. The above specifications apply also to the Mesker Side Arm Extending Sash on page 12, in all respects pertaining to construction, steel sections, **ONE PIECE ROUND CORNER** feature, general method of manufacture and installation.

SPECIFICATIONS FOR STEEL CASEMENT WINDOWS

All Casement Windows shall be the Solid Section Steel Casements as manufactured by the Mesker Bros. Iron Co., St. Louis, Mo. The frame and sash shall consist of solid section rolled open hearth steel. The steel bars at the four corners shall have a special offset mortise and tenon joint solidly welded, making the sash perfectly rigid. The Casements shall be of the Mesker double contact construction. The vertical muntins shall consist of solid section steel bars. The horizontal muntins shall be of heavy lead muntin strip. The Casement sash shall be side hinged on strong bronze plated butts neatly riveted to face of sash bar and firmly secured to the stem of the frame member. All sash shall swing outwardly from the inside except where otherwise noted. The adjuster arm shall be of machine steel. It shall be jointed at about midway of its length with a special friction joint, designed to hold the sash open at any desired angle. Each sash shall be furnished with a bronze plated, cam acting lock of artistic design, firmly attached to suitable angle bracket riveted to the sash. The vertical and horizontal mullions shall be constructed of No. 16 gauge steel. They shall be the Mesker patent tongue and groove type, strong but narrow, neat and smooth. Where transom sash are required they shall be side hinged to swing out, and shall have butts, adjusters and locks as described for casement sash unless otherwise herein specified. Unless otherwise specified all casement sash shall be equipped throughout with the Mesker (patent applied for) weatherstripping. Weatherstrips shall be of No. 11 zinc, or No. 32 gauge spring bronze, and shall be secured by tubular or split rivets according to shop practice of Mesker Bros. Iron Co. The Mesker Casement Windows must be set true and straight in the openings. Leave the window sill out until casement is installed. A recess of one inch must be provided on the inside of each window jamb and at the head. The windows must be set into this recess from the inside. Secure the windows in place with steel anchors provided for same, not less than two to each side. Do not install the Mesker Casement Windows until the building is under roof. Steel glazing clips are provided to hold the glass in the sash. Glass must be back puttied, and face puttied completely covering the clips. Use special steel sash putty. Smooth the putty neatly around the glass and strike off all excess putty. Glazing to be done from the inside. Stationary Casement Windows glazed from the outside. All casement windows shall receive one coat shop paint before leaving the factory.

Continued from Page 20

MULLIONS—Underwriters approved mullions are used, when needed to combined two or more units for large openings in Auditoriums, Classrooms, Hospital Wards, etc. They are heavily built up of plate steel and they present a very neat and trim appearance, both on the inside as well as outside.

LIGHTING SURFACE—About 15% more lighting surface is obtained by the steel window than by wood window, and they are fire proof.

STANDARD SIZES—Standard dimensions of the Combination Window are given on page 20. By ordering these sizes a more prompt shipment is assured, and at a lower cost.

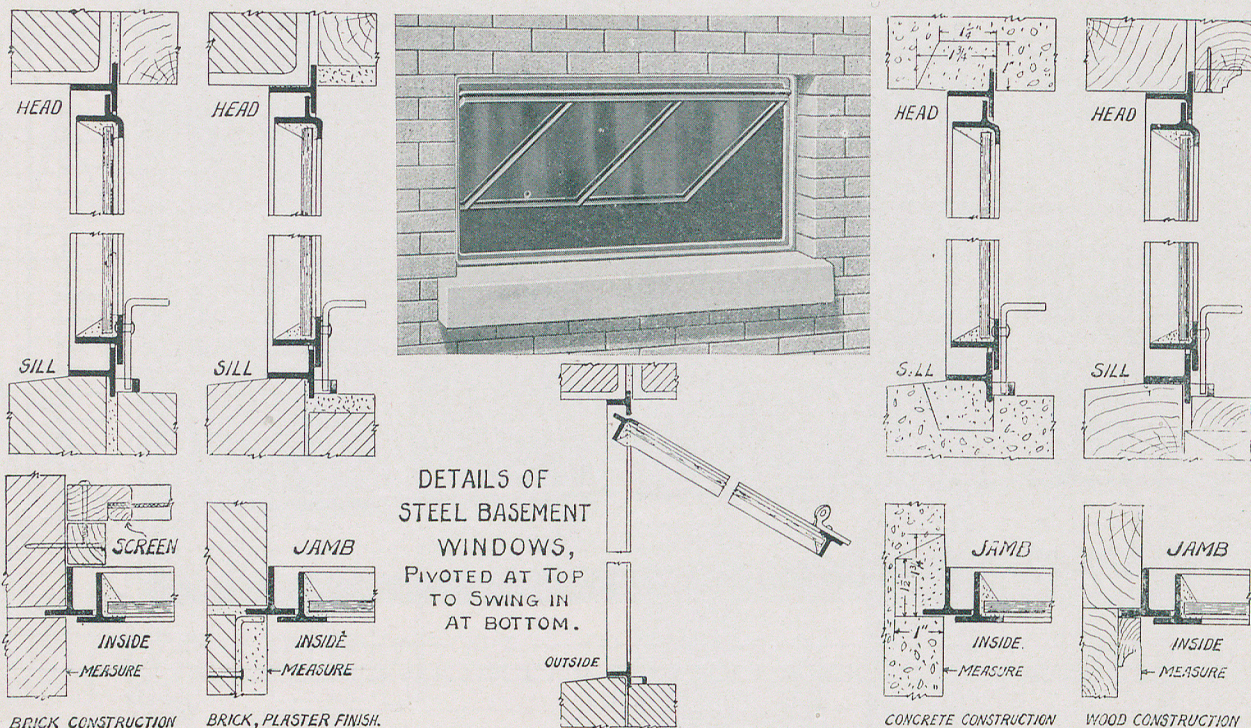
GLAZING—The sash are glazed from the inside. For the non-labeled windows, steel glazing clips and special steel sash putty should be used. Ordinary putty dries out and breaks away. For labeled windows, steel glazing angles are furnished and should be back puttied.

HARDWARE—Chains, Pulley, Locks, Lifts and Counterweights for double hung windows are included in our quotations, unless otherwise specified.

PAINTING—These windows receive a priming coat of paint before leaving the factory.

WRITE FOR PRICES—Prompt quotations are furnished on any schedule of requirements, especially low prices are given for large quantities.

SOLID SECTION STEEL BASEMENT WINDOWS



The Mesker Steel Basement Windows are made in two sizes and are constructed of solid rolled open hearth steel sections throughout, $\frac{1}{8}$ " thick. The outer frame bars of the sash and ventilator are made of **ONE CONTINUOUS PIECE OF SOLID ROLLED STEEL SECTION** welded together at the ends. This makes the sash of greatest possible strength, and perfectly square and true, so that they cannot be racked out of shape by careless or rough handling. No other sash manufactured has this superior **ONE-PIECE FRAME BAR FEATURE**.

To install Basement Windows the mason lays four or five courses of brick, leaving a half inch groove in the brick jamb on each side. Slide the sash down into these grooves, the projecting flanges of the sash extending into the grooves. Then build up the walls encasing the sash flanges into the brick work, and neatly point up with cement mortar all around. In concrete walls a rebate should be formed in each jamb and the sash is slipped down from the top into the rebate and grouted securely.

The Mesker pivot is patented. It is not a hinge or an attachment of any kind, therefore no plates, bolts, nuts, pins or other loose parts are required in its make up. It cannot rust tight when not in use. Its superiority lies in the simplicity of its formation. The Mesker Pivot permits the ventilator to be removed by window cleaners without the use of tools, and to be replaced without readjustment or refitting.

The lock is of heavy steel securely riveted to ventilator. A slotted seat is pressed into the frame for latching and insures absolute weathering. There are no springs, bolts or nuts to rust or get out of order.

Steel glazing clips to hold the glass in position are furnished. A good grade of steel sash putty should be used. Putty should be spread upon the glazing rabbet and the glass forced into same, completely filling the entire space between the glass and the steel. Face putty the glass and neatly strike off excess putty.

Our basement windows come complete ready to install in brick, stone, concrete or wood walls. They are serviceable, economical, easy to operate. The ventilator is pivoted at the top and swings in at the bottom and can be fastened to ceiling. When open 100% ventilation is obtained.

They have more lighting capacity than wooden windows, better in appearance, they are fireproof, they cost less and they last longer.

The Mesker Basement Windows are easily installed, the flanges of the frame extend into the masonry, and they are built in as the walls go up. The steel flange along the top rail extends up into the lintel construction, and the lower rail is grouted into the window sill on the inside. These windows have a priming coat of paint before leaving the factory.

Standard wooden screens may be used with basement sash from the outside. See detail above.





























STANDARD SIZES AND PRICES

3'-2 $\frac{3}{4}$ " x 1' 8", 3 lights glass 12" x 18"	\$3.54
3'-8 $\frac{3}{4}$ " x 1' 10", 3 lights glass 14" x 20"	3.82

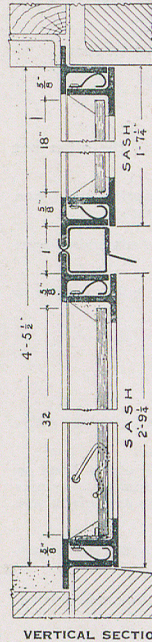
Write for discounts.

Large quantities of standard sizes are carried in stock.

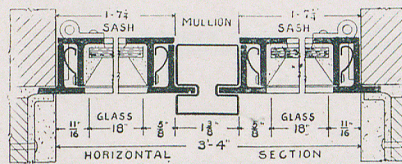
THE MESKER STANDARD SOLID SECTION STEEL CASEMENT WINDOWS

 11 PRICE \$6.65	 21 PRICE \$13.70	 31 PRICE \$20.50	 41 PRICE \$27.60
 12 PRICE \$7.50	 22 PRICE \$15.60	 32 PRICE \$23.70	 42 PRICE \$31.60
 13 PRICE \$8.60	 23 PRICE \$16.20	 33 PRICE \$27.60	 43 PRICE \$37.10
 121 PRICE \$14.15	 221 PRICE \$29.30	 321 PRICE \$45.25	 421 PRICE \$60.60
 131 PRICE \$15.25	 231 PRICE \$32.40	 331 PRICE \$49.15	 431 PRICE \$66.60
 132 PRICE \$16.10	 232 PRICE \$34.40	 332 PRICE \$52.30	 432 PRICE \$70.40
 133 PRICE \$17.20	 233 PRICE \$37.10	 333 PRICE \$56.50	 433 PRICE \$76.20





























COSTS
LESS
THAN
WOOD-
EN WIN-
DOWS



VERTICAL SECTION



WRITE
FOR
DIS-
COUNTS

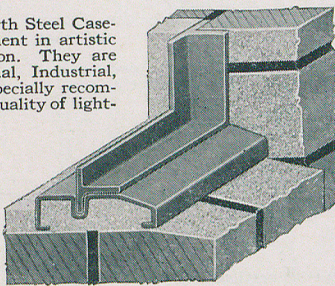
 11V PRICE \$7.35	 21V PRICE \$10.85	 31V PRICE \$14.15	 41V PRICE \$21.80
 12V PRICE \$6.60	 22V PRICE \$13.25	 32V PRICE \$17.90	 42V PRICE \$26.90
 13V PRICE \$10.40	 23V PRICE \$16.85	 33V PRICE \$23.20	 43V PRICE \$34.50
 121V PRICE \$15.95	 221V PRICE \$24.70	 321V PRICE \$41.85	 421V PRICE \$50.20
 131V PRICE \$17.75	 231V PRICE \$28.30	 331V PRICE \$47.50	 431V PRICE \$57.70
 132V PRICE \$19.60	 232V PRICE \$30.75	 332V PRICE \$51.55	 432V PRICE \$63.10
 133V PRICE \$20.80	 233V PRICE \$34.30	 333V PRICE \$56.20	 433V PRICE \$70.60

COTTAGE AND BUNGALOW TYPE, OPEN OUT

CONSTRUCTION—The Casement Windows are constructed of solid rolled open hearth steel sections. The vertical muntin is double tenoned at the ends and mortised into the frame bars. An extra sill member made of No. 16 gauge steel is furnished when desired for special installations (see illustration above) but it is not at all a necessary part of the Casement Window. This is not included in above prices but is included when requested in inquiries.

STANDARD SIZES—Standard opening dimensions of the Mesker Steel Casement Windows are given above. More prompt delivery as well as lower prices is assured when ordering these sizes, and owing to large quantity production minimum cost is attained and low prices are quoted.

LIGHTING CAPACITY—One hundred per cent ventilation is obtainable by this type of window, and at least 50% more lighting area than with the ordinary wooden window, and they cost less. The Standard



SPECIAL SILL FOR CASEMENT WINDOW

Steel Casement Windows are fireproof when glazed with rough ribbed or polished wire glass, and glazing angles are used.

MULLIONS—The 1 3/4" wide mullion is of the tongue and groove type and is protected by United States patent. They are slender, yet very strong, and are used when two or more single units are combined to fill large openings.

Having all hardware attached no further fitting is necessary. They must be polished wire glass, and glazing angles are used. See that sash line up with adjoining sash, and nail two lugs on each side into masonry. All casements swing out right or left as desired. Do not install casements until building is under roof.

GLAZING—The Mesker Casement Sash are glazed from the inside and steel glazing clips are furnished for holding the glass firmly in place. The glass should be back puttied, and neatly face puttied covering the clips entirely and leaving a neat smooth finish. Use special steel Sash putty, as ordinary putty dries out and breaks away. Steel glazing angles are furnished at extra cost.

HARDWARE—Lock of the cam acting type and handle of artistic design, in brass finish, is attached to bracket of each sash. Sturdy Steel hinges of brass finish and removable pins connects the sash to the frame. A jointed friction adjuster restrains the sash when open and holds it in the desired position.

LEADED ART GLASS CASEMENTS—When Cottage Casements with small lights are required as shown in right hand corner above, a vertical 3/4" solid section T bar muntin is furnished with heavy leaden horizontal sash bars, shipped separately. They are to be attached to sash when glazing is being done. Clear, colored or translucent glass may be used for such artistic effect as may be adapted to carry out the desired design.

INTERIOR FINISH—Since wood interior trim is not considered a necessity in modern homes, and as sanitation is being more carefully observed in building construction, plaster finish is preferably recommended for sides, head and sill of the interior where the Mesker Casement Windows are used.

WEATHERSTRIPPING—Our (patent applied for) metal weatherstripping attachment to solid section steel sash is of the utmost simplicity and cost less than weather stripping wooden windows and much neater in appearance, and prevents rattle, and is rainproof, windproof, and dustproof. The cost is only a trifle extra. Weather strips may be preferred for their neat appearance, softness of closure and air tight qualities. They are made of No. 11 gauge zinc, or No. 32 gauge spring bronze and furnished only when ordered. Weather strips may be attached to our casements by owners subsequent to receiving the windows, and may be attached without the assistance of a skilled mechanic before glazing. No practical method has been previously designed for fastening metal weather strips to steel sash. The means employed in the Mesker method is of utmost simplicity and practicability. With this latest achievement in weather stripping no triple contact is necessary since the weather strips are secured to the sash. The Mesker metal weather stripped, air tight, casement windows have no rival for their artistic beauty and superior qualities. Weatherstripping not included in above prices.

MESKER MONITOR STEEL SASH

TYPE 1—See details.

Shows a top hinged continuous vertical sash in any length. For heights 2'-10 1/2", 3'-10 1/2" and 4'-10 1/2" clear openings between structural angles. Glass sizes 20" x 35", 20" x 37" and 20" x 59" respectively.

Heights over 4'-10 1/2" a heavier and more costly construction must be used.

Units or Sections made in lengths 10'-0" and not exceeding 12'-0".

The end lights adjoining each operating run are fixed as shown.

Weathering caps G and H are of No. 18 steel, one side riveted, the other not attached, for expansion and contraction.

Sash bars are of solid rolled open hearth steel sections, joined by mortise and tenon interlocking joint and pressed by heavy machinery, making a rigid joint.

A continuous angle 1 1/4" x 1 1/4" x 3/16" is riveted to vertical bars for attaching arms of mechanical operating devices.

Glazing is done from the outside. Glazing clips are supplied for holding glass in place. Glass 3/16" or 1/4" in thickness is recommended.

We furnish no structural steel nor flashing at heads, sills or ends.

TYPE 2—See details.

Represents a horizontal pivoted row of sash and can be used in vertical plane only. Fixed units may be combined alternately with ventilated units.

Standard units of sash described on opposite page may be used, either fixed or ventilated. Combined with our tongue and grooved mullion, they make up a continuous run of monitor sash at a great saving in cost over special sizes and give most satisfactory service.

Monitor mullions C are of No. 16 steel and their construction provides for expansion and contraction without bolts or slotted holes.

Swing sash or ventilators must clear all trusses, vertical supports, diagonal bracing or other framing.

Glazing is done from inside and any thickness of glass may be adopted in sizes of 12" x 18" and 14" x 20".

Continuous mechanical operators for operating the ventilators are suggested, although long chains may be used or they may be operated individually from runways.

We furnish no structural steel nor flashing at heads, sills or ends.

TYPE 3—See details.

Illustrates a combination of continuous top hinged in upper, and continuous fixed sash in lower portion.

The clear openings between structural angles to be 2'-10 1/2", 3'-10 1/2" and 4'-10 1/2" in height for both upper and lower runs of sash, making overall clear opening height 5'-9", 7'-9" and 9'-9".

Glass sizes for the top hung sash are 20" x 34 1/2", 20" x 46 1/2" and 20" x 58 1/2" and for the lower portion, or fixed sash are 20" x 35", 20" x 47" and 20" x 59" respectively, for the 2'-10 1/2", 3'-10 1/2" and 4'-10 1/2" heights.

For heights over 4'-10 1/2" a special, heavier and more costly construction is designed but not illustrated in this catalogue.

The sections are made in lengths approximately 10'-0" and not exceeding 12'-0".

The end lights adjoining each operating run are fixed.

Weathering caps T are of No. 18 steel.

Sash bars and muntins are of solid rolled open hearth steel sections and jointed as in type 1.

A continuous angle 1 1/4" x 1 1/4" x 3/16" is riveted to vertical bars for attaching arms of mechanical operators.

The lower run of fixed sash is held in place by means of hook bolts and by anchor clips, see detail.

Glazing must be done from the outside and our special glazing clips are furnished. Glass 3/16" or 1/4" in thickness is recommended and should be puttied and back puttied.

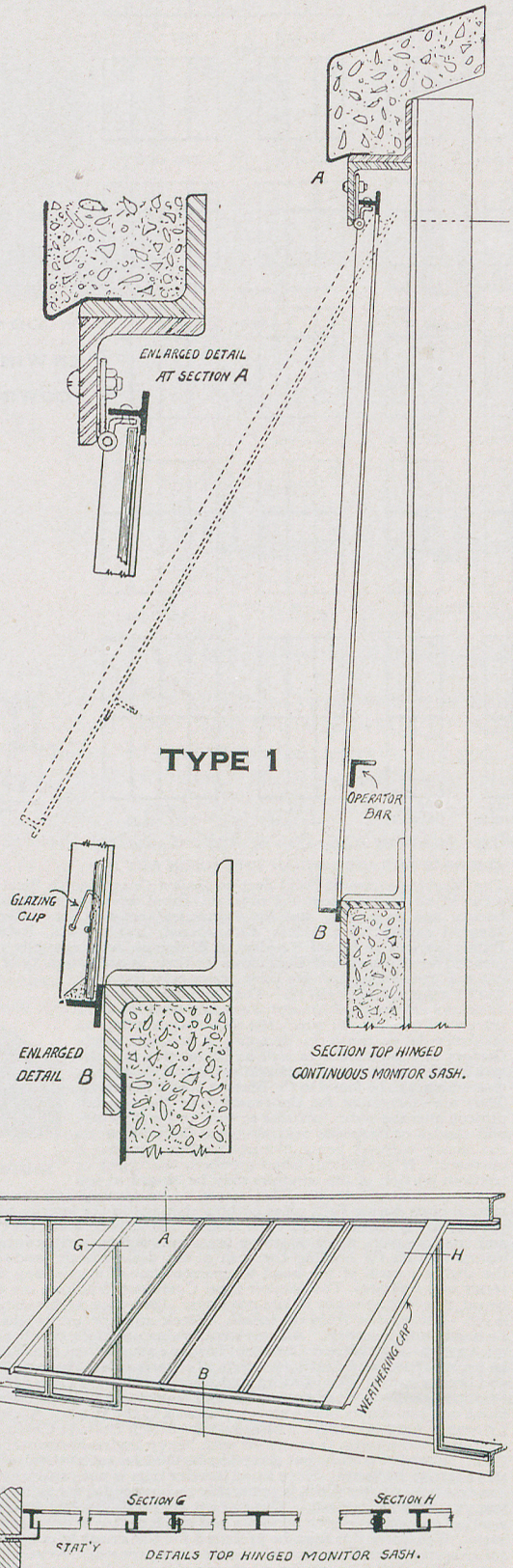
We furnish no structural steel nor flashing at heads, sills or ends.

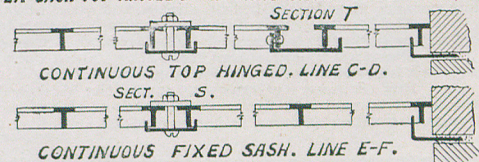
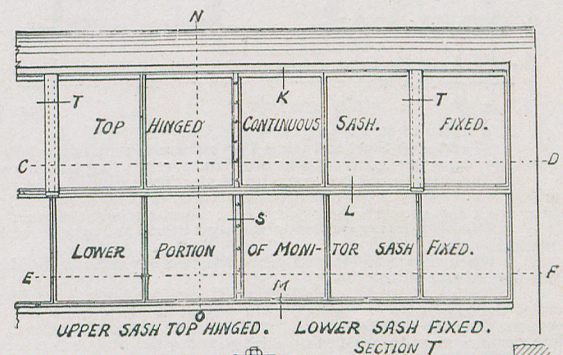
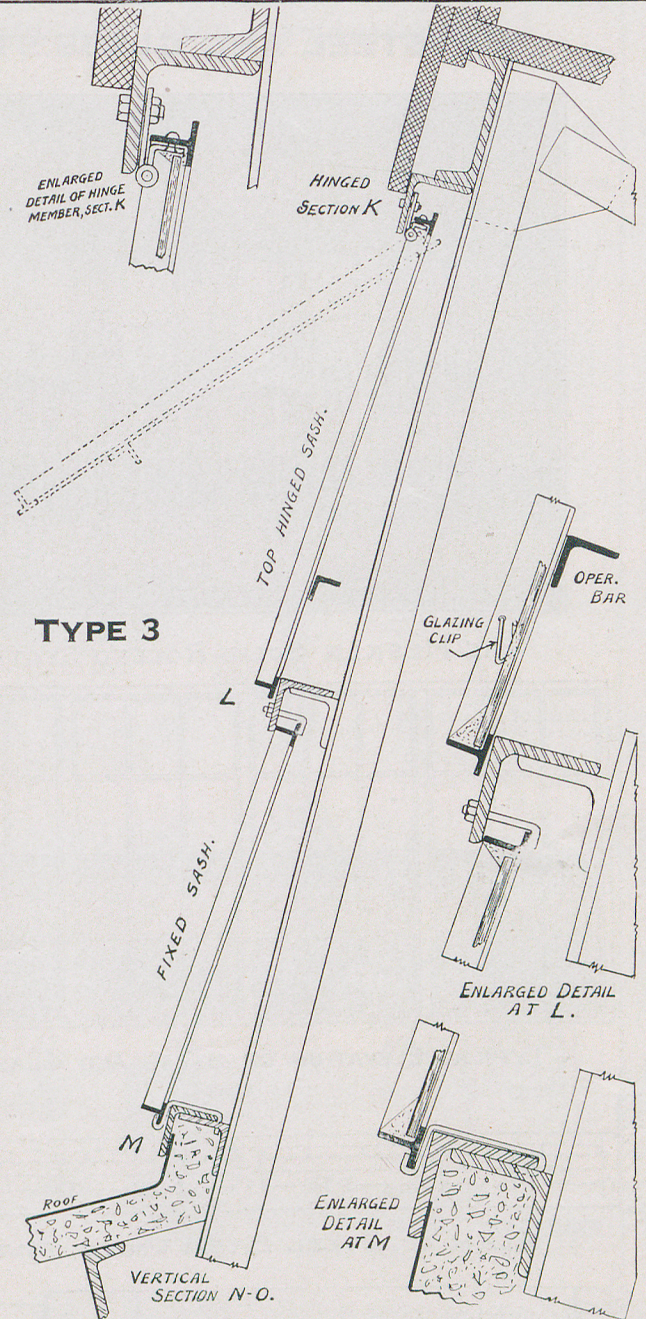
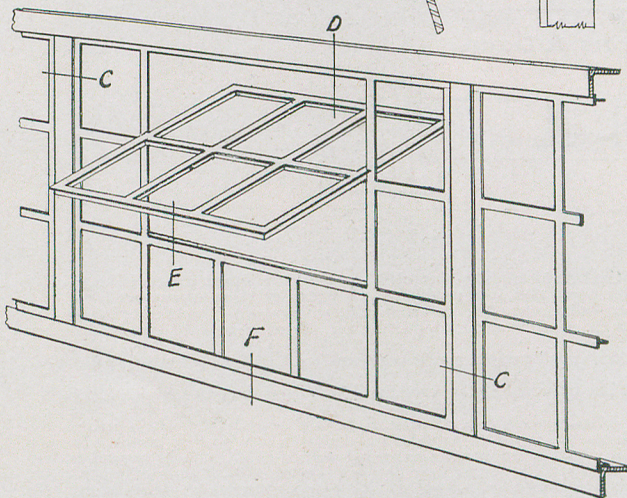
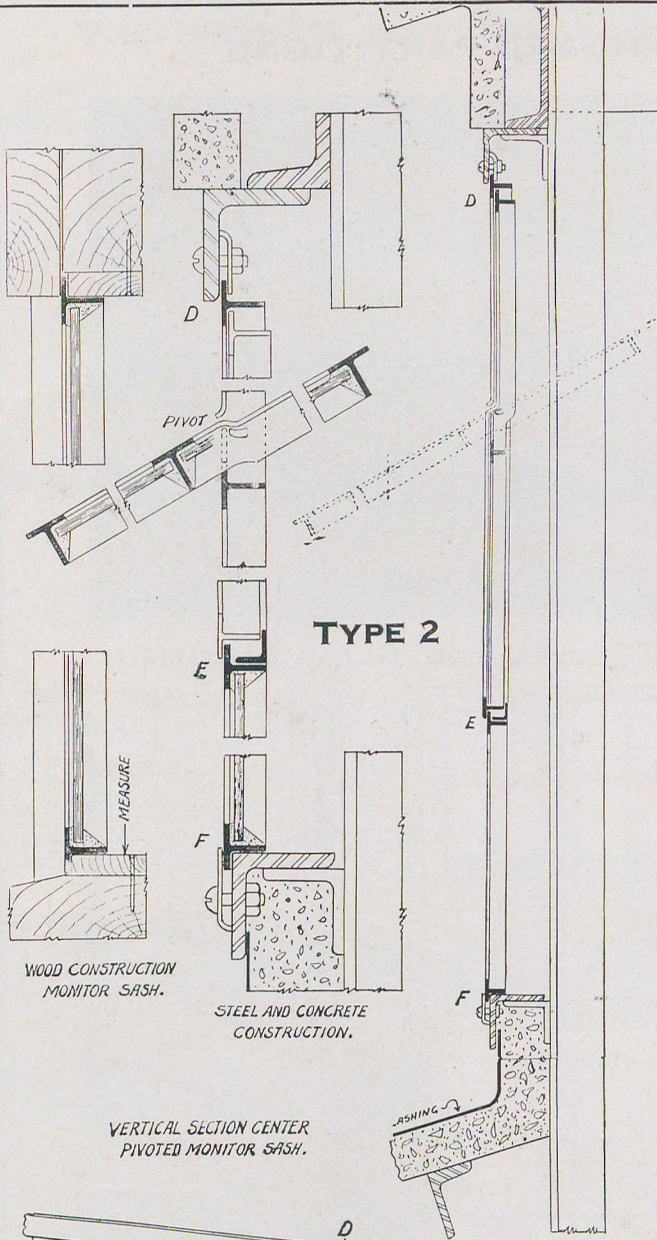
MECHANICAL OPERATING DEVICES

Continuous Operators (at extra cost) will be supplied. Maximum lengths operated by one controlling station are as follows:

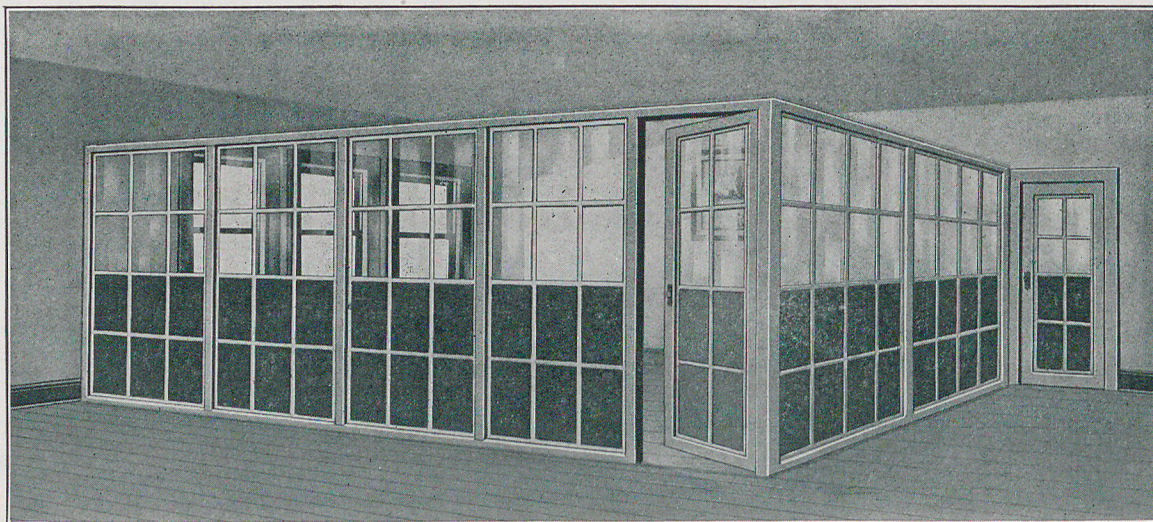
Type 1—Vertical, any height.....	120' 0"
Type 2—Vertical, any height.....	80' 0"
Type 3—Vertical, 30°—3' 0".....	70' 0"
Type 3—Vertical, 30°—4' 0".....	60' 0"
Type 3—Vertical, 30°—5' 0".....	50' 0"

When requesting quotations give total run of feet of each monitor, number of ventilators, distance from floor to bottom of ventilators and state if operating chains can hang perpendicularly or if they must be operated off the vertical plane of sash—give distance.

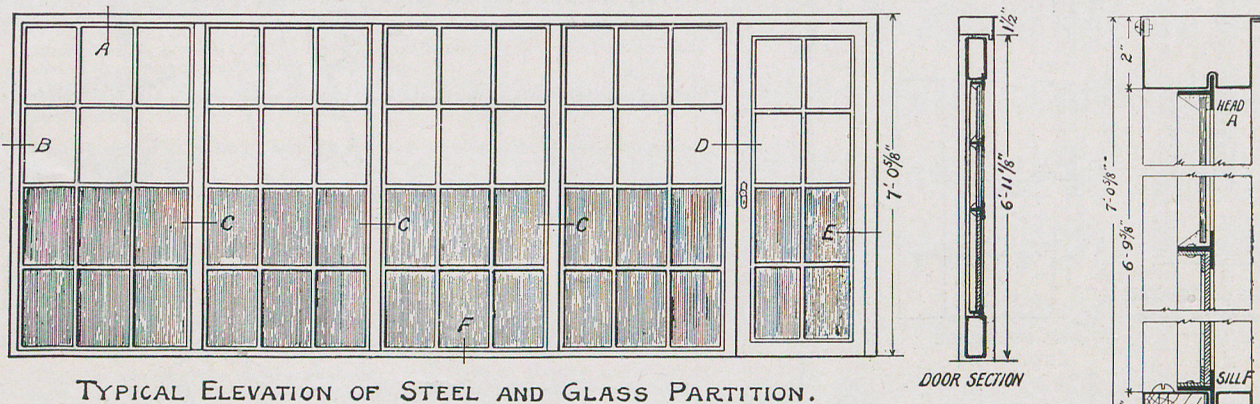




STEEL AND GLASS STANDARD PARTITIONS



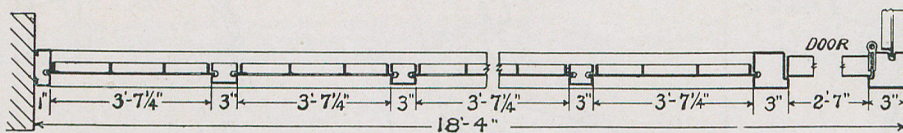
THE MESKER SOLID ROLLED SECTION STEEL AND GLASS PARTITION.



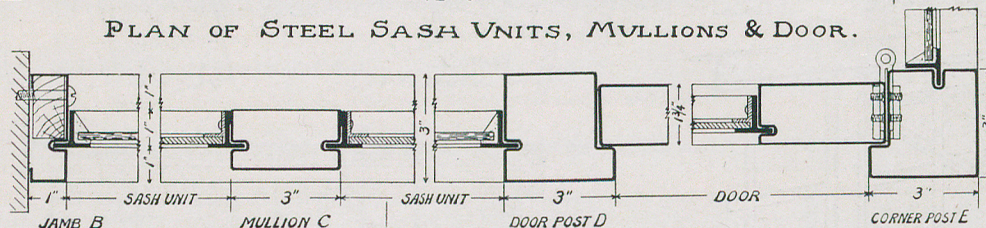
TYPICAL ELEVATION OF STEEL AND GLASS PARTITION.

DOOR SECTION

FLOOR



PLAN OF STEEL SASH UNITS, MULLIONS & DOOR.



The Mesker Steel and Glass Partitions are intended for office enclosures on the interior of mills, factories, garages, warehouses, machine shops, office buildings, department stores, balconies, banks, etc. They are fireproof, durable, easy of erection, inexpensive and they present a fine appearance.

These partitions are made up of standard units of solid rolled section steel sash, designed to be artistically grouped with the Mesker tongue and groove mullions for any condition, dimension, or arrangement of plan. Partitions designed from our standard sizes, given on page 10, can be delivered from stock and at much lower prices than when specially designed.

The wainscoting portion of these partitions are paneled with heavy steel plate, and the upper panels are glazed with ribbed, florentine, wire, plate or window glass.

When arranging for steel partitions, it is advisable to avoid coming in direct line between existing columns. Partitions should be, as far as possible, run clear of any obstruction.

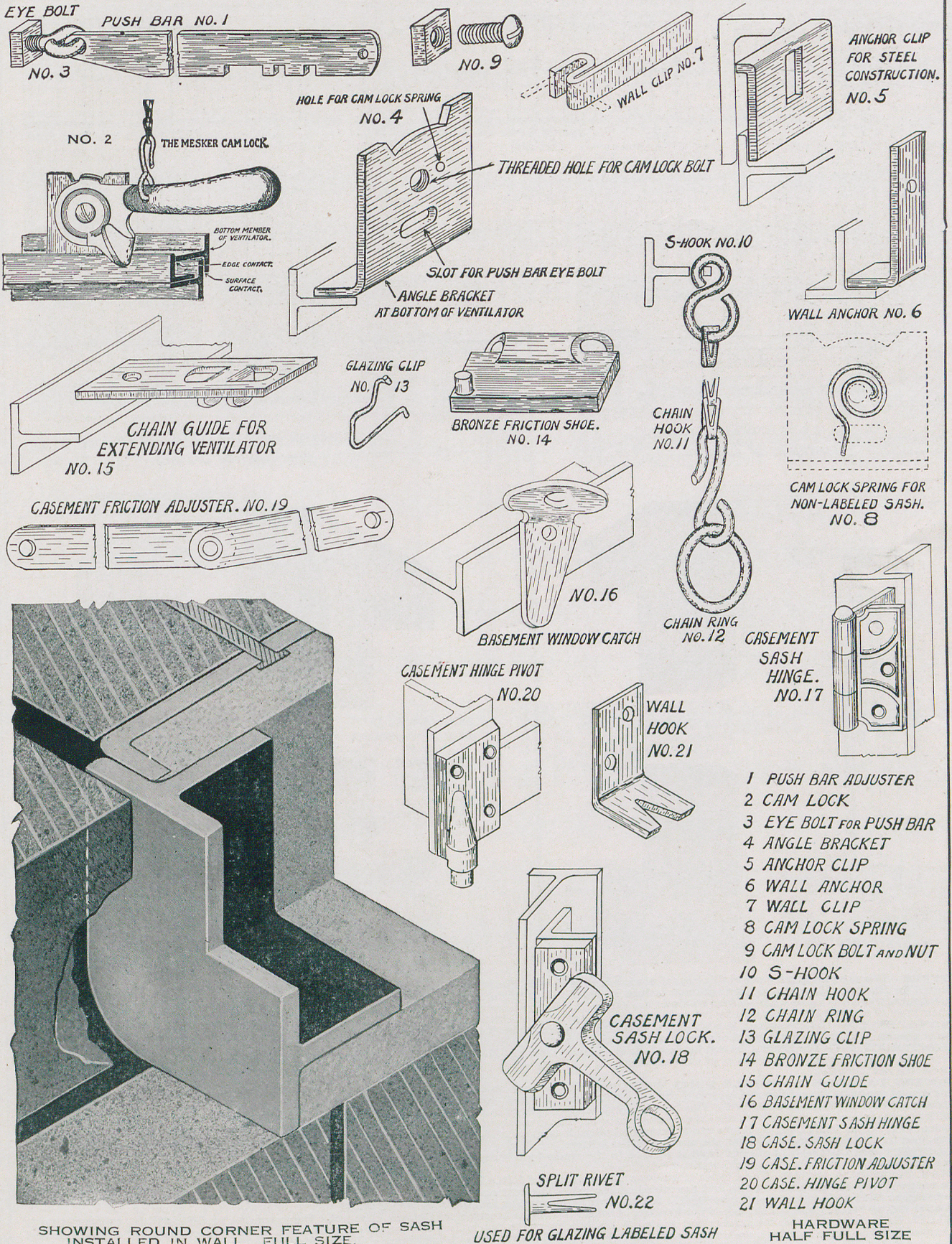
The partition illustrated above is approximately 7 feet high, leaving ample space for the circulation of air and heat. Where it is desired, the entire enclosure may extend up to the ceiling by filling the space between the sash and ceiling with metal lath and plaster, or with steel plates. In such construction the mullions should run from the floor to the ceiling. In most cases, it would be impractical to extend sash to ceiling and fit around sprinkling systems, steam pipes, beams, girders, and other obstructions contiguous to the ceiling. Ventilators may be placed in the sash at any desired location.

The Mesker design of mullions makes it possible to readily remove partitions, which so often is required, and permits them to be taken apart. No bolts, nuts or pins to be removed. Any or all units may be re-erected without removing the glass.

Doors are manufactured from heavy rolled open hearth steel, welded at joints. Latches or locks and bolts are provided where needed. Doors and door frames are not drilled for hinges or door checks. This should be done by the contractor erecting doors to insure correct fit.

Any ordinary mechanic may install the Mesker Partitions with utmost simplicity, they fit like matched tongue and groove flooring after starters are bolted to wall and floor. Send sketch or plan of your requirement, showing existing walls and outline of partition needed, with full dimensions. Designate position of doors, height of partition from floor and location of ventilators, if any.

THE MESKER STEEL SASH HARDWARE AND ATTACHMENTS



THE MESKER COMBINATION SHEET STEEL AND SOLID ROLLED SECTION STEEL WINDOWS

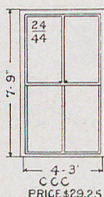
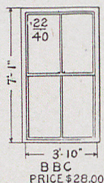
STANDARD SIZES, COUNTER-BALANCED WINDOWS

WRITE FOR DISCOUNTS

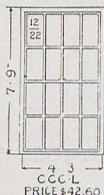
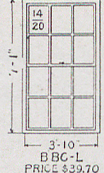
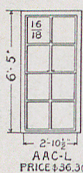
STANDARD SIZES, COUNTER-WEIGHTED WINDOWS

Widths Heights

3'-1½" x { 6'-5"
7'-1"
7'-9"



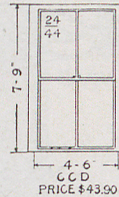
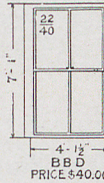
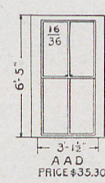
4'-1½" x { 6'-5"
7'-1"
7'-9"



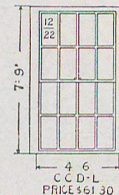
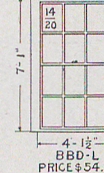
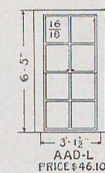
L—Indicates Labeled Windows, others non-labeled.

Widths Heights

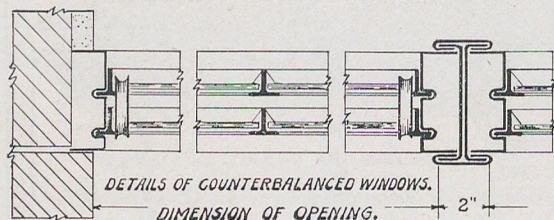
2'-10½" x { 6'-5"
7'-1"
7'-9"



3'-10" x { 6'-5"
7'-1"
7'-9"

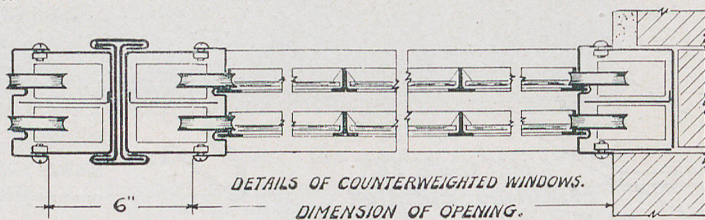


L—Indicates Labeled Windows, others non-labeled.



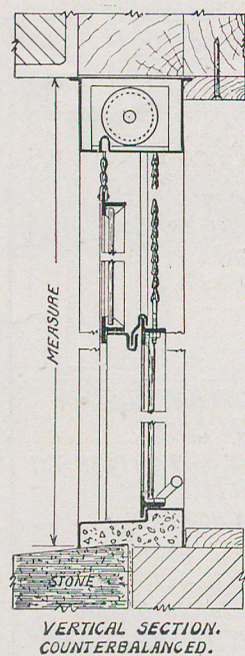
DETAILS OF COUNTERBALANCED WINDOWS.

DIMENSION OF OPENING.

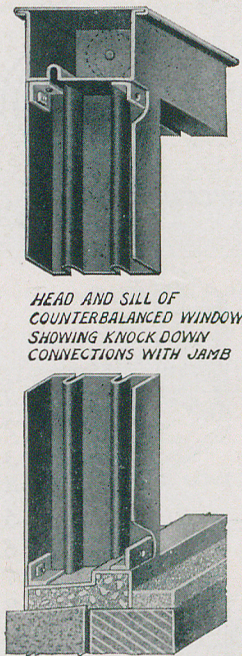


DETAILS OF COUNTERWEIGHTED WINDOWS.

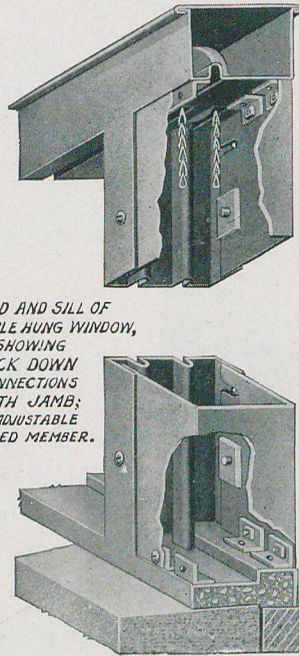
DIMENSION OF OPENING.



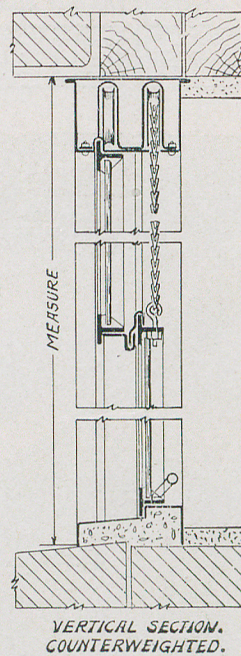
VERTICAL SECTION. COUNTERBALANCED.



HEAD AND SILL OF COUNTERBALANCED WINDOW, SHOWING KNOCK DOWN CONNECTIONS WITH JAMB



HEAD AND SILL OF DOUBLE HUNG WINDOW, SHOWING KNOCK DOWN CONNECTIONS WITH JAMB; ALSO ADJUSTABLE GROOVED MEMBER.



VERTICAL SECTION. COUNTERWEIGHTED.

TYPES—The most desirable types in this class of window are the Double Hung (or counterweighted) and the Counterbalanced Windows. These are especially suited for Business, Educational, Institutional, Industrial, Public, Residential and Recreational Buildings.

UNDERWRITERS LABELED—These windows are subject to the rigid requirements and inspection of the National Board of Fire Underwriters, bearing their label of approval and accepted by rating bureaus everywhere in the United States and Canada as Standard Underwriters' Windows.

NON-LABELED—The non-labeled windows are of the same construction as the labeled, except that the glass in the non-labeled windows is held in place with steel glazing clips and putty, instead of steel glazing angles.

CONSTRUCTION—The heads, sills and jambs of the windows are made of No. 16 gauge steel, or No. 24 gauge galvanized steel. Grooves are formed in the frame to receive the projecting flanges of the sash members. The sash operates in the grooves with a vertical movement and insures easy operation and is perfectly weathertight.

ACCESS TO WEIGHTS, DOUBLE HUNG WINDOWS—The grooved members of the jamb in the Double Hung Window are adjustable for the double purpose of removing the sash should occasion require, and for giving access to counter-weights after the window is installed.

COUNTERBALANCED WINDOWS—This type is recommended in preference to the Double Hung type. The frames are constructed of No. 16 gauge steel with grooves formed to receive the flanges of the sash members. The grooves permit perfect weathering and easy operation of the sash. The two sash counter-balance each other being hung on chains which pass over pulleys in the head. When open, the window allows 50% ventilation, heated air escapes through the top, and fresh air is admitted through the opening at the bottom.

CONNECTION LUGS—The sill and head is secured to the jambs by a series of angle lugs riveted to the sill and head and fastened to the jambs by tap screws threaded into the lugs. (See illustrations.)

MAY BE KNOCK DOWN—These types of windows may be furnished KNOCK DOWN form, thereby saving a considerable amount in freight cost. When so ordered, they are shipped in parts and assembled on the job. The cost at the factory is less. The cost of assembling at building must be added. The subsills are filled with concrete at the building. Instructions for assembling accompanies each order.

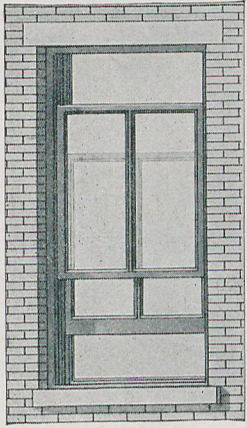
SASH CONSTRUCTION—The sash is constructed of solid rolled open hearth steel section. The outer frame consists of ONE PIECE CONTINUOUS STEEL BAR, bent round at the corners and welded at the splicing of the two ends. The muntins are also of solid steel section, mortised at the ends and tenoned into the frame members, making the sash perfectly rigid and cannot warp out of square.—Continued on page 13.

MESKER FIREPROOF HOLLOW METAL WINDOWS

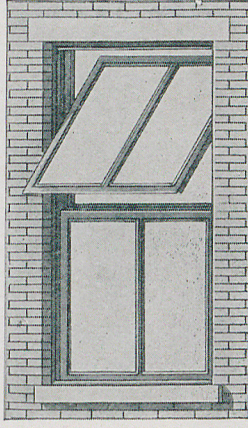
Approved by the National Board of Fire Underwriters. Adapted to new and old buildings. Designed along the same lines and contain the same glass area as wood windows. **FRAMES AND SASH** of No. 24 gauge galvanized steel or 20 oz. copper. **CONCRETING** of sub sill must be done at building.

Type A. Double Hung.....	5' 0" x 10' 0"	Maximum Openings	Type D. Double Casement.....	5' 0" x 10' 0"	Maximum Openings
Type B. Standard Pivoted.....	5' 0" x 10' 0"		Type H. Single Pivoted.....	5' 0" x 5' 0"	
Type C. Double Pivoted.....	5' 0" x 10' 0"		Type K. Single Top Hinged.....	5' 0" x 5' 0"	

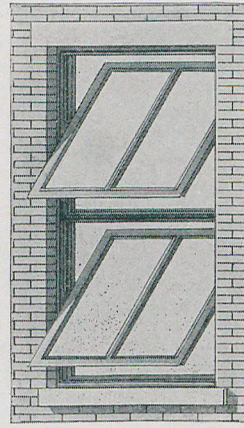
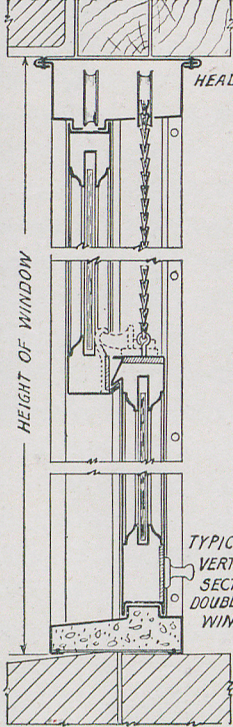
GLASS must not exceed 720 square inches, exposed area per light, and no light longer than 54 inches, except for windows in street elevations where such light is limited to 2916 square inches. **TRANSOMS** of hinged, pivoted or stationary types may be used over all windows or multiples. **TRANSOM BARS** for windows 10 feet high and under, are all sheet metal. **MULLIONS** are of a non-bearing character, made of No. 16 gauge galvanized steel, and limited to 12 feet high. They must extend 3 inches down into sills and same distance up into brick arches where segments are used. For square head windows mullions must be attached to lintels with knees and bolts. **HARDWARE.** We supply windows complete, inclusive of hardware, sash weights and chains, fusible links for pivoted windows; 1/4-inch rough ribbed, maze, prism or polished wire glass, cut accurately to sizes and boxed separately. **UNDERWRITERS** label is a guarantee that windows comply with every requirement and are accepted everywhere by rating bureaus as standard. The removing and replacing of sash as easily accomplished as in wood-windows, an important factor of cost.



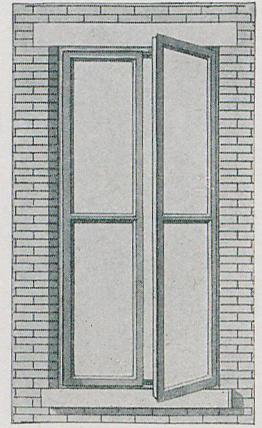
DOUBLE HUNG, TYPE A.



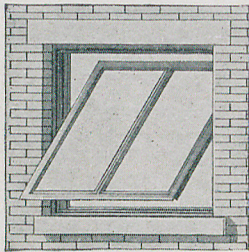
STANDARD PIVOTED, TYPE B.



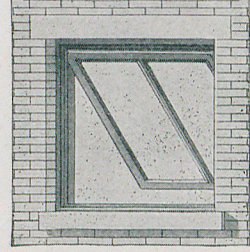
DOUBLE PIVOTED, TYPE C.



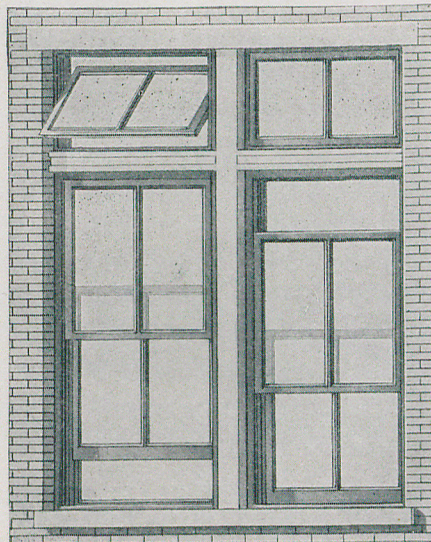
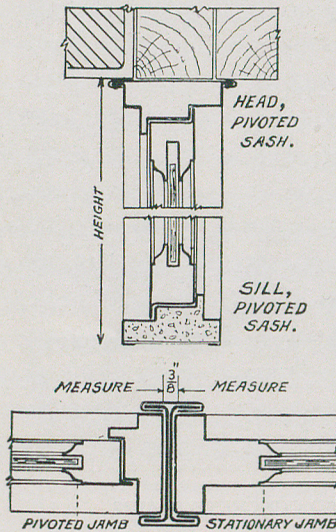
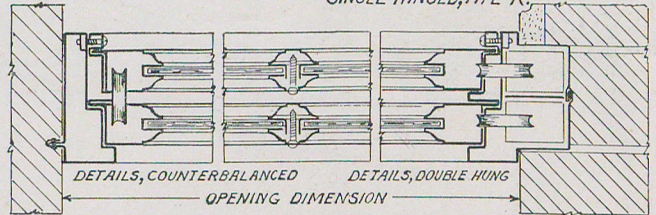
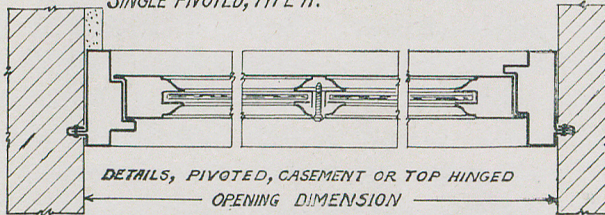
CASEMENT, TYPE D.



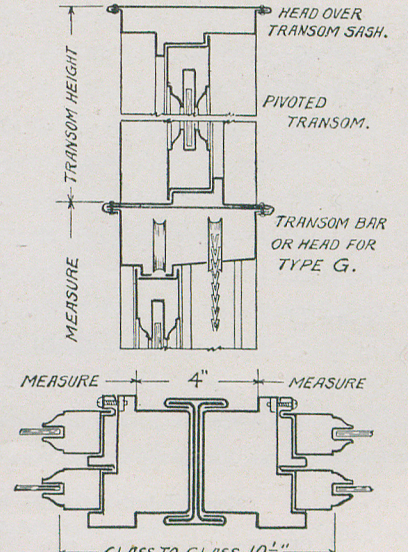
SINGLE PIVOTED, TYPE H.



SINGLE HINGED, TYPE K.

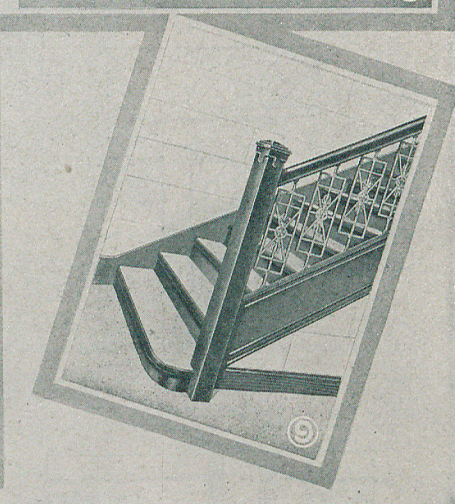
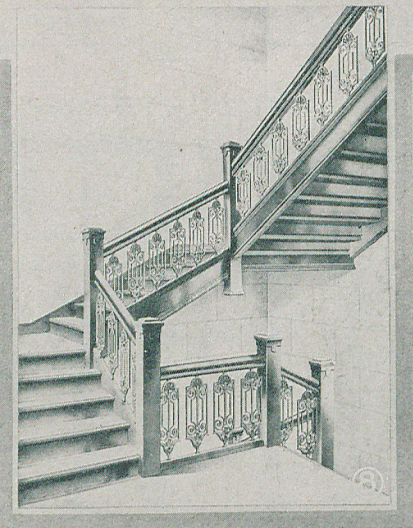
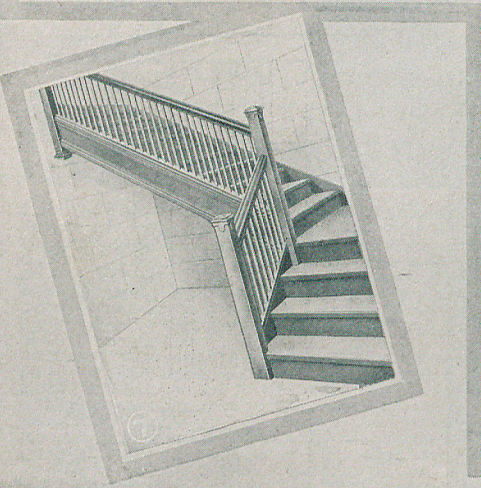
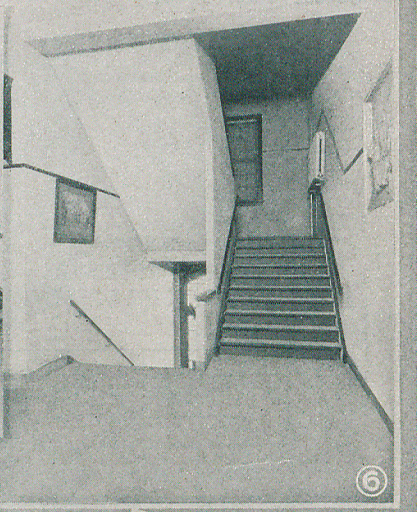
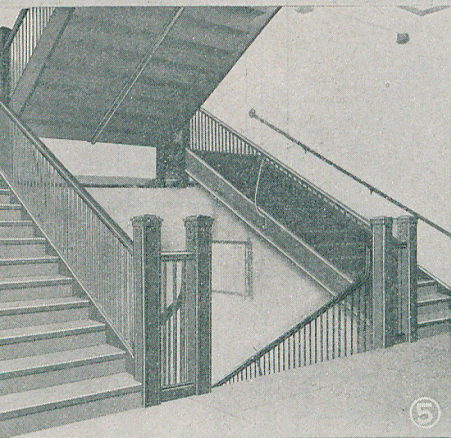
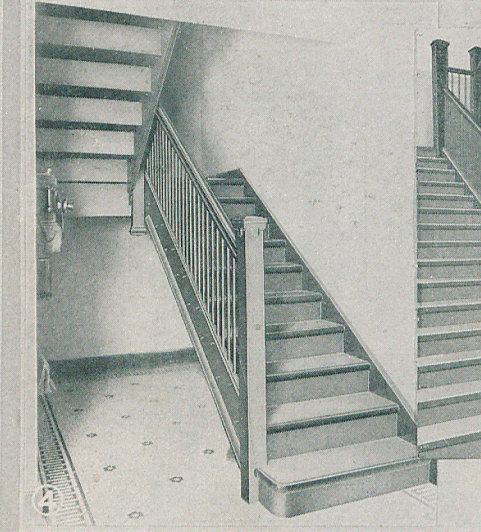
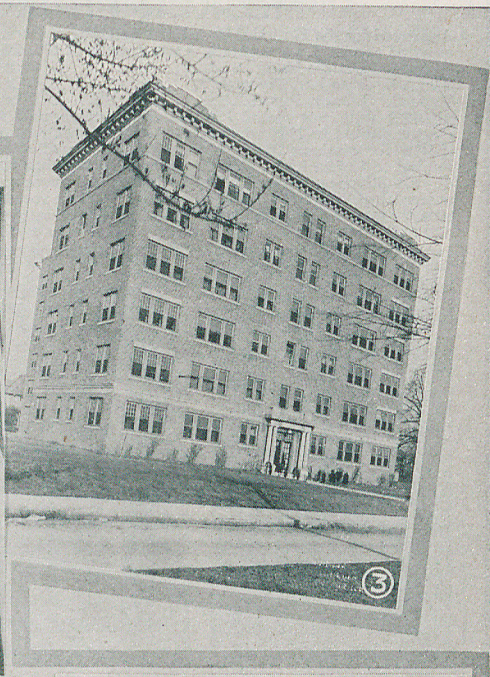
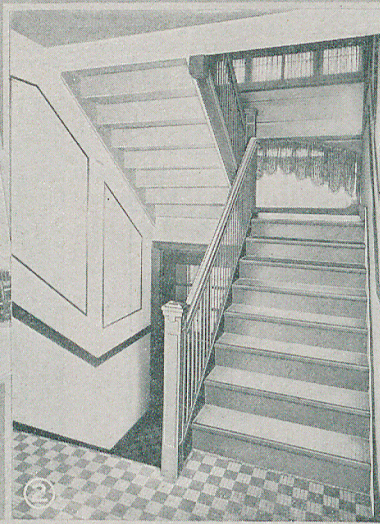


TWIN DOUBLE HUNG, TYPE G.



UNDERWRITERS' APPROVED MULLION, TYPE G.

UNDERWRITERS' APPROVED MULLION FOR TYPES B.C.D.H.K.



Many hundreds of buildings have been equipped with the MESKER PATENT STEEL AND CONCRETE STAIRS

A GROUP OF A FEW TYPICAL INSTALLATIONS

1. Gillet-Kerr Building, Tulsa, Okla.
2. Brady Apartments, Des Moines, Iowa.
3. Alameda Apartments, Memphis, Tenn.

4. Alameda Apartments, Interior Stairs.
5. Linton-Stockton School, Linton, Ind.
6. Alamo Iron Works, San Antonio, Texas.

7. Typical Stair Installation.
8. Typical Stair Installation.
9. Typical Stair Installation.

MESKER PATENT COMBINATION STEEL AND CONCRETE INTERIOR STAIRS

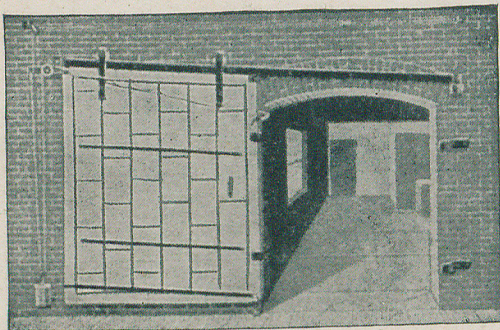
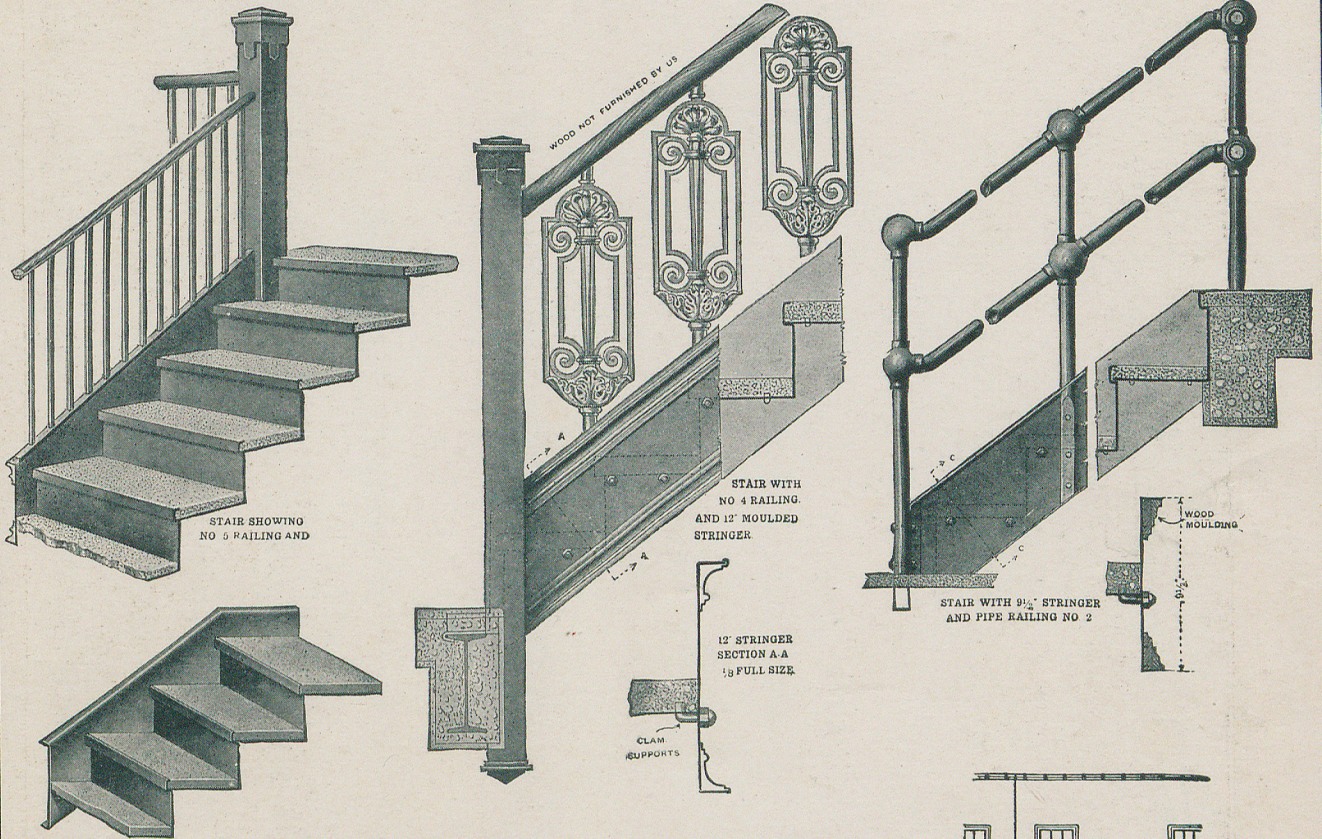
THE MESKER STAIRS are specified as a "STANDARD" of construction throughout the country and are installed in some of the best buildings erected within the past 15 years.

SPECIFICATIONS—Stringers shall be $\frac{1}{8}$ -inch steel plate, bent in channel form and of width shown on plans. Treads and risers shall be made of one continuous steel plate No. 12 or No. 13 gauge, bent to form as indicated. Treads shall be supported at ends by special clamps, securely bolted to stringers with acorn heads on face strings and shall be filled with concrete or other material by others. (Tread filling $1\frac{1}{2}$ inches more or less in thickness.)

Platforms or landings, where required, shall be No. 12 or No. 13 gauge steel plates, with nosings same as treads and supported on a 2 by 2 by $\frac{1}{8}$ -inch angle frame, riveted or bolted to stringers, and reinforced with tees not over 2 feet on centers.

Newels shall be No. 12 gauge blue annealed steel with cast iron caps and pendants. Newels to be welded at corners, making a continuous one-piece seamless newel.

Railings to be of design indicated on drawings. All to have a coat shop paint.

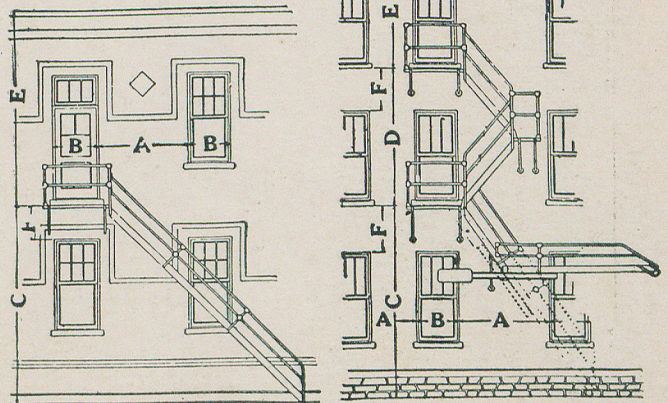


TIN CLAD FIRE DOOR

We supply standard tin clad fire doors, single and double hinged, horizontally and vertically sliding, with hardware and wall bolts complete, constructed to meet Underwriters' requirements and bearing their label of approval, which is a guarantee that the work has been subject to the most rigid inspection.

Angle or channel frames are furnished in connection with hinged doors, although they may be arranged to lap the openings 4 inches on each side and top, making frames unnecessary in bearing walls.

Doors are of two or three thicknesses of wood, tin clad, according to location in building and thickness of walls to which they are attached.



FIRE ESCAPES

We manufacture FIRE ESCAPES in conformity with the various State laws, with or without counter-balanced bottom section, with or without ladder to roof. They are shipped in complete sections prepared for easy erection by any mechanic.

For Schools, Colleges, Hospitals and Theaters the stair portion is usually 36 inches wide, while for other structures it is 24 inches wide with platforms to suit the conditions.

When inquiring for prices, give the following information:

- A—Distance between windows.
- B—Width of window openings.
- C—Distance from grade to underside of second story window or door sills.
- D—Distance between window sills.
- E—Distance from upper window or door sills to top of fire walls or roof.
- F—Distance from top of windows to underside of sills.

Mention the character of buildings and where unusual conditions exist, describe fully.



DEALERS GREAT OPPORTUNITY TO SELL THE MESKER COTTAGE AND BUNGALOW CASEMENT WINDOWS

Price of Casement Windows, 1' 7 1/4" x 1' 7 1/4", each.....\$ 7.35
 Price of Casement Windows, 1' 7 1/4" x 2' 9 1/2", each..... 8.60
 Price of Casement Windows, 1' 7 1/4" x 4' 5 1/2", each..... 10.40
 Price of Casement Windows in groups, see page 15.
 Price of Casement Windows, Sills and Lintels, see page 15.

Extra for weatherstripping.....\$0.80
 Extra for weatherstripping..... 1.10
 Extra for weatherstripping..... 1.40

The above prices include adjustable friction stay, cam lock, hinges and glazing clips, complete ready for installation. No glass.

F. O. B. cars St. Louis, Mo.

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